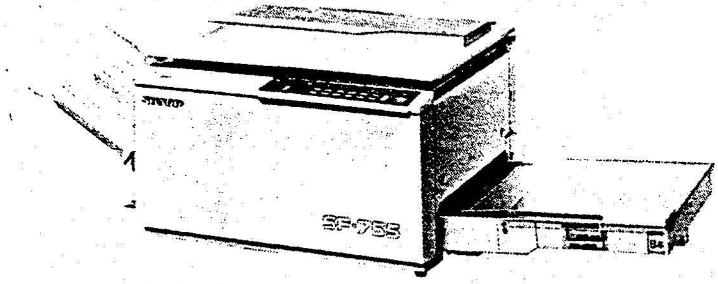
SHARP SERVICE MANUAL

00ZSF755ME/EL

No. 1 Mechanical section
Electrical section



MODEL SF-755

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SHARP CORPORATION

- ○ Other than this Service Manual No. 1, please refer to documents Service Manual No. 2 〔Adjustment Self-diagnosis and test function Maintenance (00ZSF755AD/PM)〕, Parts Guide (00ZSF755PG/PL), Circuit Diagram (00ZSF755C/C-M) for SF-755.
- ○ Please use 13 digits code described in the right hand corner of the front cover of the document, when you place an order.

For U.S. only — Use order codes provided in advertising literature.
Do not order fronm parts department.

[1] BASIC SPECIFICATIONS

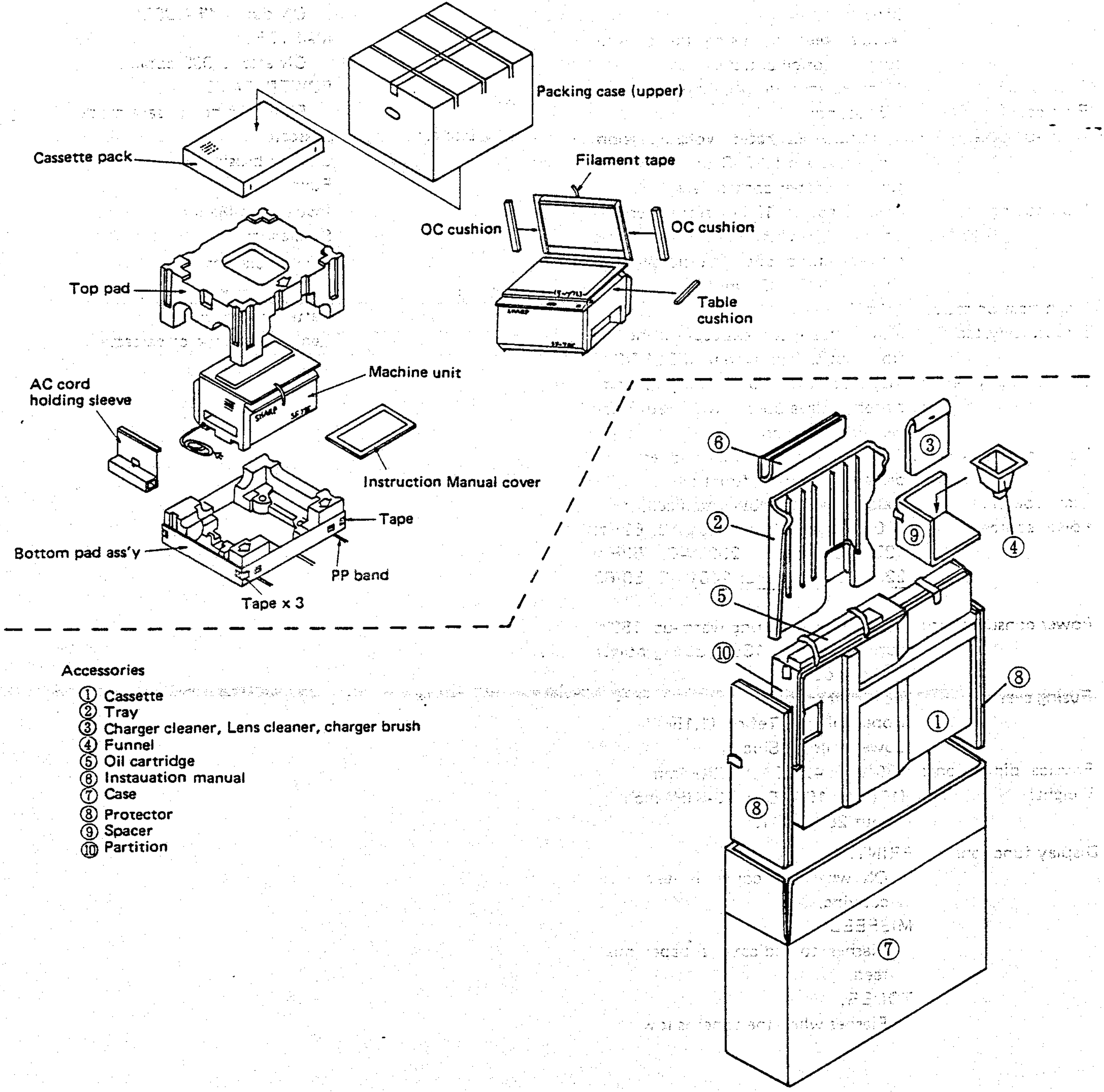
Type:	Desktop
Copying system:	Dry-type electrostatic Plain Paper Copier
Kinds of originals:	Sheets, books, three-dimensional objects
Original size:	B4 (8½" x 14") max.
Copy size:	Using cassette feed. A4 (8½" x 14"), A5 (8½" x 5½"), B4 (8½" x 14"), B5 (8½" x 7") Manual feed. B4 (8½" x 14") to library card (75mm x 125mm)
Paper feed system:	Automatic feed by cassette (Cassette capacity: 250 sheets of Sharp brand paper) Manual feed by using the cassette cover for original table
Copy speed:	10 copies/minute (All sizes)
First copy:	7.5 seconds
Warm-up time:	1 minute at rated voltage, room temperature of 20°C or more, with toner in proper control level
Multicoping:	1 to 99 copies, 10 key setting, countdown type, with repeat, pause, and subtotal functions. (Multicopy possible in the PAUSE mode)
Magnification ratio:	1:1±1%
Exposure system:	Moving table slit exposure using the fiber optics lens system (SELFOC®)
Developing system:	Magnetic brush developing (2-component developer) with auxiliary cleaning function
Toner supply system:	Equipped with automatic toner dispensing control function
Light source:	Halogen lamp, 300W (stablized)
Power source:	110VAC, 50/60Hz; 120VAC, 60Hz; 127VAC, 60Hz; 200VAC, 50Hz; 220VAC, 50/60Hz; 240VAC, 50/60 Hz
Power consumption:	1.35kW, max. during warm-up, 180W during standby, 135W during power save standby
Fusing system:	Heat roller type, Upper roller ... Teflon (1.15kW) Lower roller ... Silicon
Physical dimensions:	430(W) x 420(D) x 260(H)mm (17(W) x 16-½(D) x 10-¼(H) inch)
Weight:	About 28kg (62 lb)
Display functions:	PRINT: ON when the copier is ready for copying. MISFEED: Flashes to indicates a paper misfeed. TONER: Flashes when the toner is low. MAINTENANCE: PRINT lamp flashes when scheduled maintenance is required after 8,000 copies. DISPLAY: Indicates multicopy entry with countdown function. MANUAL: ON during manual paper feed mode. REPEAT: ON during "REPEAT". PAUSE: ON during "PAUSE" MASTER: ON after 8,000 copies. POWER SAVE: Flashes in power save mode.
Accessories:	Cassette Charger brush Funnel Instruction Manual SL cleaner Charger cleaner
Options:	Universal cassette Letter/invoice cassette Legal/letter/invoice cassette

[2] UNPACKING AND INSTALLATION

1. Unpacking

(1) Open the package in the following sequence in reference with the illustration below.

1) Cut away the PP bands.
2) Remove the upper packing case.
3) Take out the top pad ass'y.
4) Cut tape at four corners of the bottom case and open flaps, then remove the machine from the carton.


Packing case (upper)
Cassette pack
Filament tape
OC cushion
OC cushion
Table cushion
Top pad
Machine unit
AC cord holding sleeve
Instruction Manual cover
Tape
Bottom pad ass'y
PP band
Tape x 3
⑥
③
②
④
⑨
⑤
⑩
⑧
①
⑧
⑦

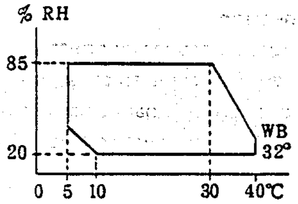
Accessories

① Cassette
② Tray
③ Charger cleaner, Lens cleaner, charger brush
④ Funnel
⑤ Oil cartridge
⑥ Instauation manual
⑦ Case
⑧ Protector
⑨ Spacer
⑩ Partition

[3] SUPPLIES, SUPPLY SETUP, AND DEVELOPER LEVEL ADJUSTMENT

1. Supplies

Typical life,

	Typical Life	Storage
Master	8,000 copies	
Developer	8,000 copies	
Toner	5,000 copies per 200g bottle (For size A4 or letter size with 6% toned area).	

* These are estimate only. Life will vary depending on actual usage.

2. Installation requirements

Note the following conditions when installing the copier.

(1) Environment

① Avoid installation in direct sunlight or in a bright location near a window. Close curtains and shades. The brightness must be under 1500 lux.

② Avoid installation in a hot damp place or where rapid changes in humidity occur (near air conditioner, for instance).

The recommended environmental condition:
20°C to 25°C, 65±5%RH (60°F to 77°F)
The nominal environmental condition:
15°C to 30°C, 20 to 85%RH (59°F to 86°F)
In the case of 35°C, the humidity should be 65%.

③ Avoid installation in a place where dust or vibration is envountered.

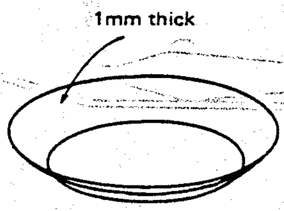
④ Avoid installation in a place where ventilation or air circulation is not good.

⑤ Never install the machine near inflammables or ammonia gas.

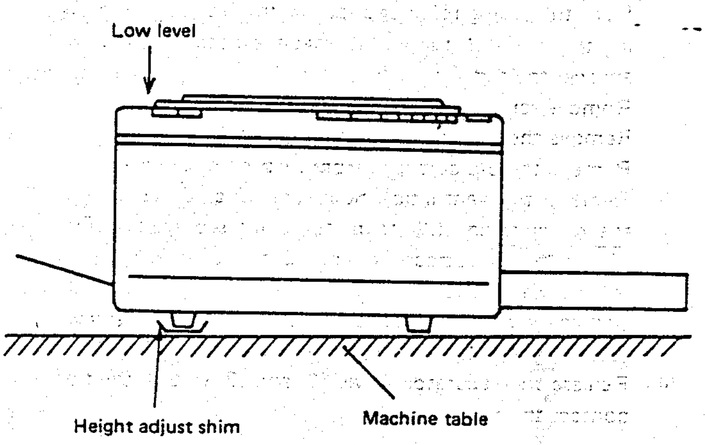
(2) Machine table

Check level of the copier table using a level. Insert height adjusting shims between the rubber footing and the table until the copier is level.

Parts code of water level: UKOGM0054CSZZ



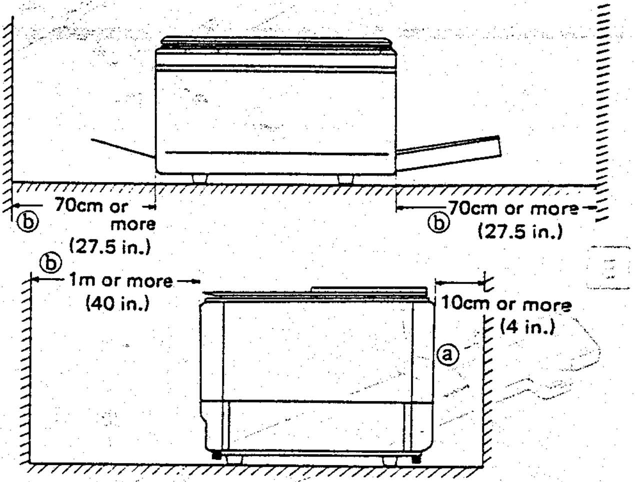
Parts code of height adjust shim: PSRA-0002FCZZ



CAUTION: Underfoned or overfoned conditions may occur to copy quality unless the machine is leveled.

(3) Space around the machine

ⓐ Have better air circulation.
ⓑ Allow easy operation.



ⓒ Install the machine near a wall outlet.

(4) Power source

① The power supply line should have a capacity of 15A, capable of supplying more than 90% of the rated voltage at the full load.

② Do not used an extension cord from the same wall outlet.

(5) Ground connection

① Wall outlet must be ground connected.

② Connect the ground cable to an authorized ground line connected to a copper bar longer than 65cm buried underground. Never connect to a gas supply line.

3. Installation of oil cartridge

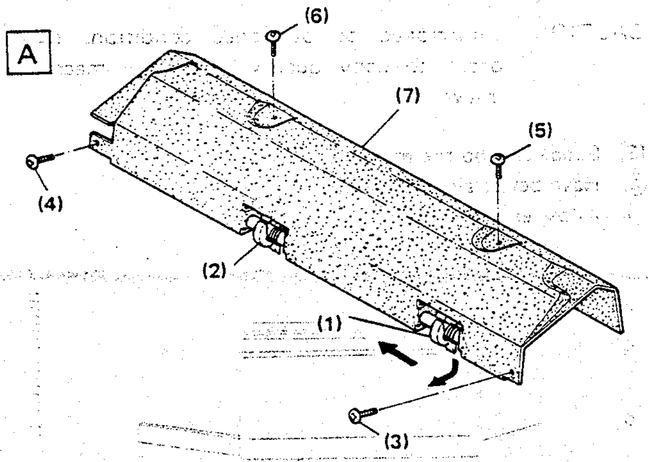
(1) Refer to Fig. A
Rotate the tips of the separator pawls (1) and (2) away from the fusing roller and lock in this position by moving the pawls to the left so that the notch in the pawl engages the pin.
Romove screws (3), (4), (5) and (6).
Remove the brown fusing roller cover (7).
Remove the old cartridge from its protective cover.

(2) Remove the ventilation hole tape (Fig. B -(9)) from the oil cartridge (8), then, following sequence in Fig. D and E attach the oil cartridge to the fusing roller cover as shown in C.

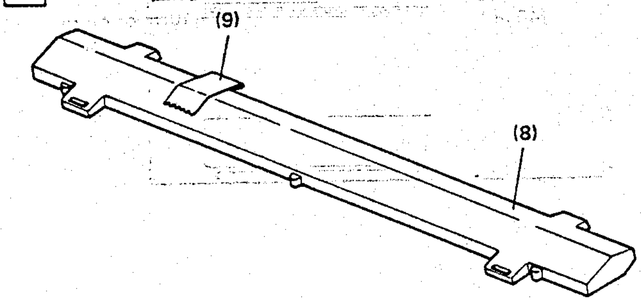
(3) Replace fusing roller cover (7) and attach with screws (3), (4), (5) and (6).

(4) Release the separator pawls (1) and (2) so that the tips contact the fusing roller.

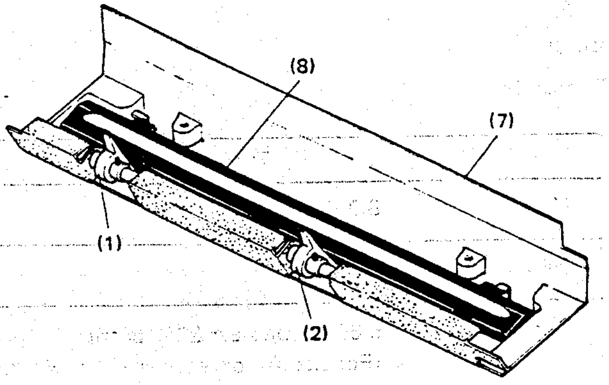
A



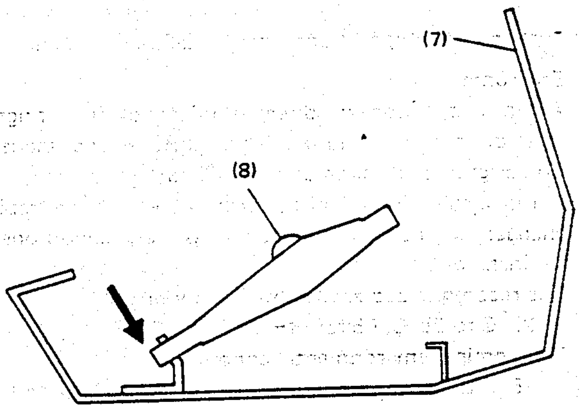
B



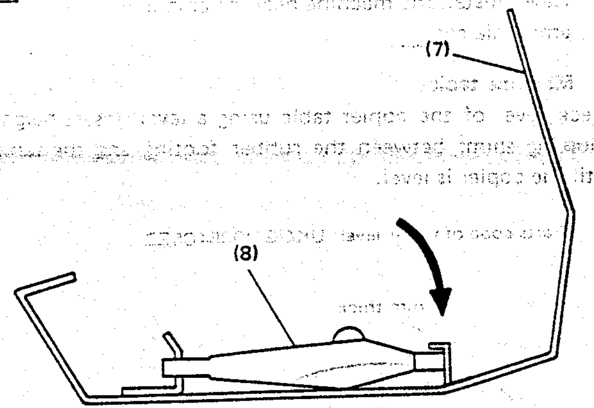
C



D



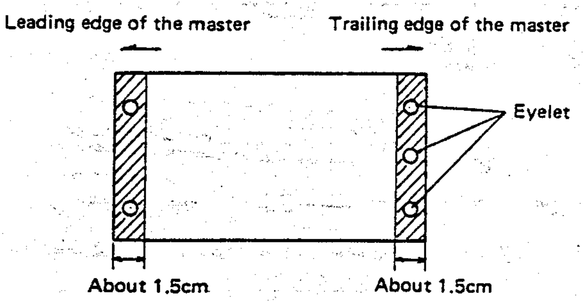
E



4. Installing the master

(Cautions when replacing the master)

- Hold the shadowed portion of the master in order to avoid damaging the colored photoconductive layer with fingerprints and scratches.
- Never handle the master in direct sunlight.
- Do not leave the master in light for a long time (5 minutes maximum under 1000 lux). Note that sunlight has a light intensity of about 10,000 to 30,000 lux.

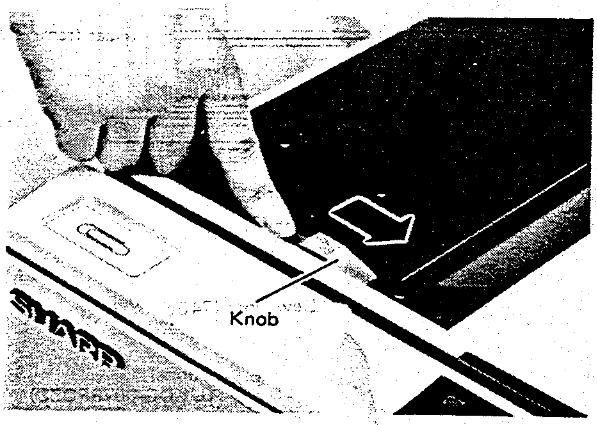

Leading edge of the master
Trailing edge of the master
Eyelet
About 1.5cm
About 1.5cm

- The master used for the SF-750 cannot be used for the SF-755 because it is larger in its width, and different eyelet positions and number of eyelets.

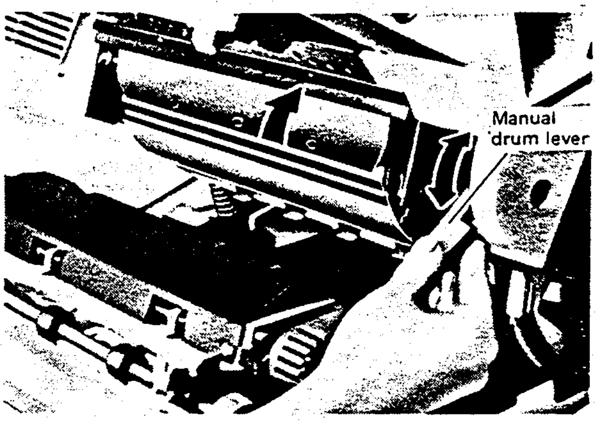
(1) How to install the master

① Turn power off and open the clam shell mechanism. Open the front cover, move the original table to the right side, and open the clam shell mechanism by moving the knob towards the arrowhead.

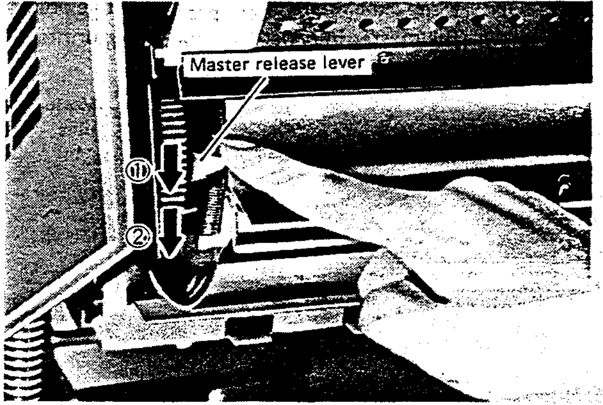
NOTE: Knob lock will not be released unless the front cover is opened.



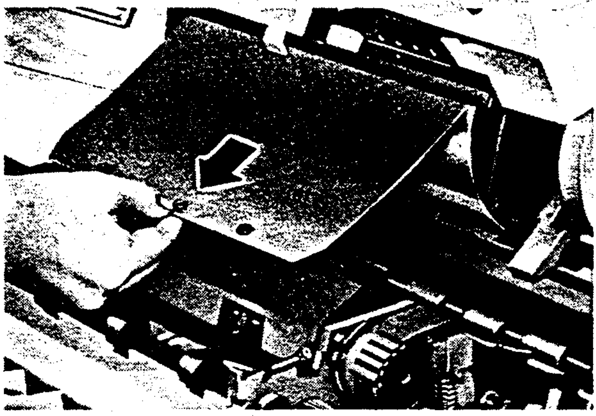
② Turn the drum until the master clamp comes into view. Move the manual drum lever to rotate the drum clockwise.


Manual drum lever

③ Push the master release lever down two steps. The lever is located on the right of the rear side of the drum.
At position 1:
Free the master trailing edge.
At position 2:
Free the master leading edge.

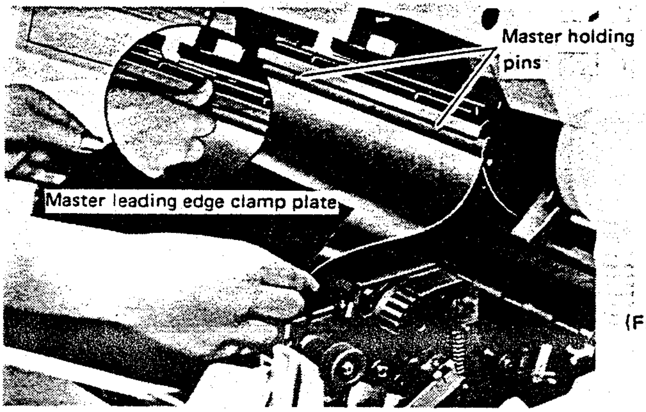

Master release lever
①
②

④ Remove the used master. Disengage the leading edge of the master which has holes without eyelets and the trailing edge of the master which has holes with eyelets from master holding pins, then pull out the master by the trailing edge.

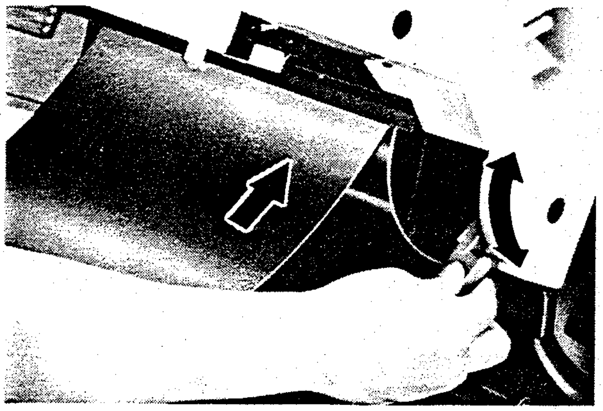


⑤ Secure the leading edge of the new master. Engage holes in the leading edge of the new master, without eyelets, to the edge holding pins, with the photoconductive layer (colored surface) facing up. Then, push the master leading edge clamp plate to close and hold the leading edge of the master tight on the drum.

CAUTION: Keep the dark master protective bag on the master in order to avoid finger prints.

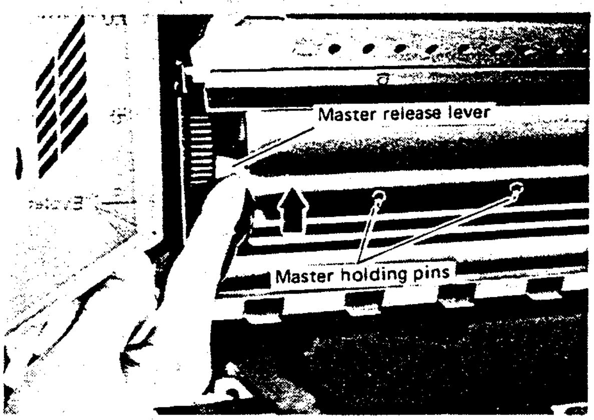

Master holding pins
Master leading edge clamp plate

⑥ Remove the dark master protective bag and turn the drum to wind the master around the drum. The leading edge of the master should have been secured before turning the drum.



⑦ Secure the trailing edge of the master: Engage holes in the master trailing edge with the master holding pins and push the master release lever up one more step to secure the trailing edge of the master on the drum.

CAUTION: Place the master cover the drum in such a manner that the leading edge of the master should come right over the master trailing edge holding cover.


Master release lever
Master holding pins

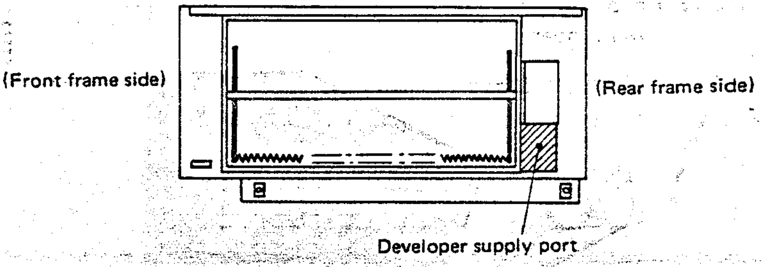
5. Developer level adjustment

The developer level adjustment can be performed with the DV unit in the machine or with it removed. If you adjust the DV level with the DV unit in the machine go to (1), if you perform the procedure with the DV unit out of the copier go to (2).

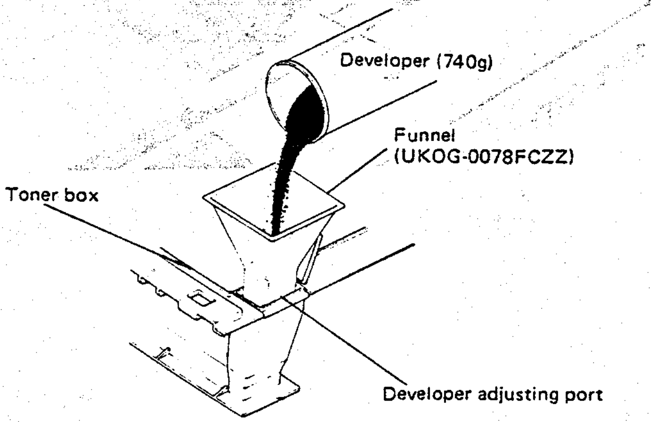
Installing developer in the DV unit

(1) DV unit in the copier

① Open the toner box cover and then developer port cover. Insert the DV funnel into the developer port.


(Front frame side)
(Rear frame side)
Developer supply port

(Top view of the toner box)


Developer (740g)
Funnel
(UKOG-0078FCZZ)
Toner box
Developer adjusting port

② Open the front cover and turn the copier ON. Key in test program "25", then close the front cover interlock switch and push PSW.
The main motor will start to rotate for 1 minute.

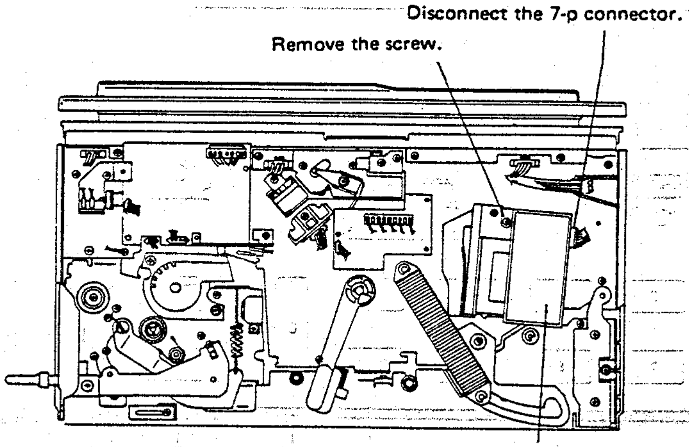
③ While the main motor is rotating, gradually add the entire contents of the developer bottle to the DV unit. If the main motor stops before the bottle is empty, push PSW again.

④ After the bottle is completely empty, repeat CROP 25 three more times to insure that the developer in the DV unit is level.

CAUTION: Opening and closing the door switch during the execution of test program 25 will cause self-diagnostic status "L4".
Keep the door switch closed while test program 25 is in operation and do not open the door switch until the test program is complete.
In case the status "L4" is indicated by accidental opening and closing the door switch during the execution of the test program 25, use test program 14 to reset.
Proceed to Developer Level Adjustment Procedure.

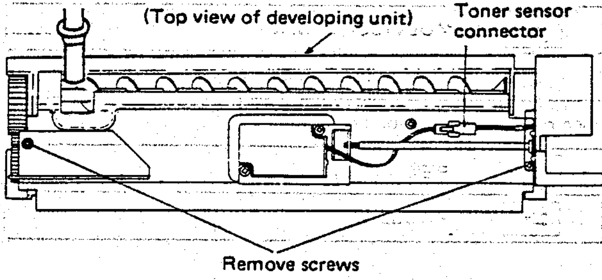
(2) DV unit removed from the copier

① Open the front cover. Disconnect the 7-p connector from the DV unit and remove the DV holding screw.

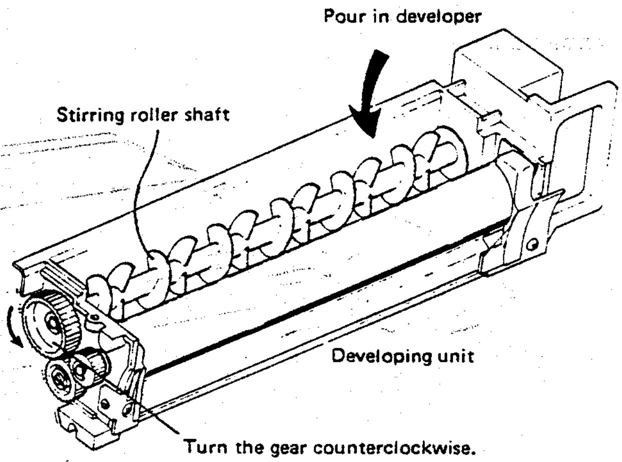

Disconnect the 7-p connector.
Remove the screw.
Developing unit

② Remove the DV unit from the copier.

③ Disconnect the toner sensor connector, the remove the 2 screws holding the DV cover in place and remove the cover.


(Top view of developing unit)
Toner sensor connector
Remove screws

④ Pour the entire bottle of developer into the DV unit while rotating the MG roller.


Pour in developer
Stirring roller shaft
Developing unit
Turn the gear counterclockwise.

⑤ Replace the DV cover, reconnect the toner sensor connector, reinstall the DV unit in the copier, and reconnect the 7-p connector.

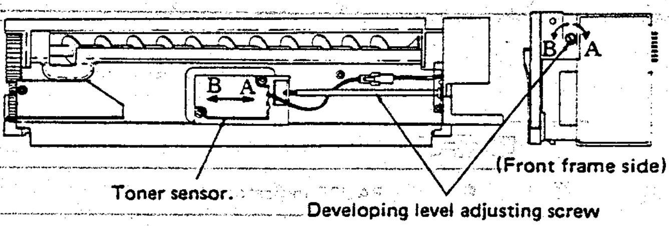
⑥ Open the front cover and turn the copier ON. Key in test command "25", then close the front cover interlock switch and push PSW.
The main motor will start to rotate for 1 minute.
Repeat CROP 25 three more times to insure that the developer in the DV unit is level. Proceed to Developer Level Adjustment Procedure.

(3) Developer level adjustment procedure

① This procedure must be completed using CROP 25. If the main motor stops during this adjustment, re-enter CROP 25.

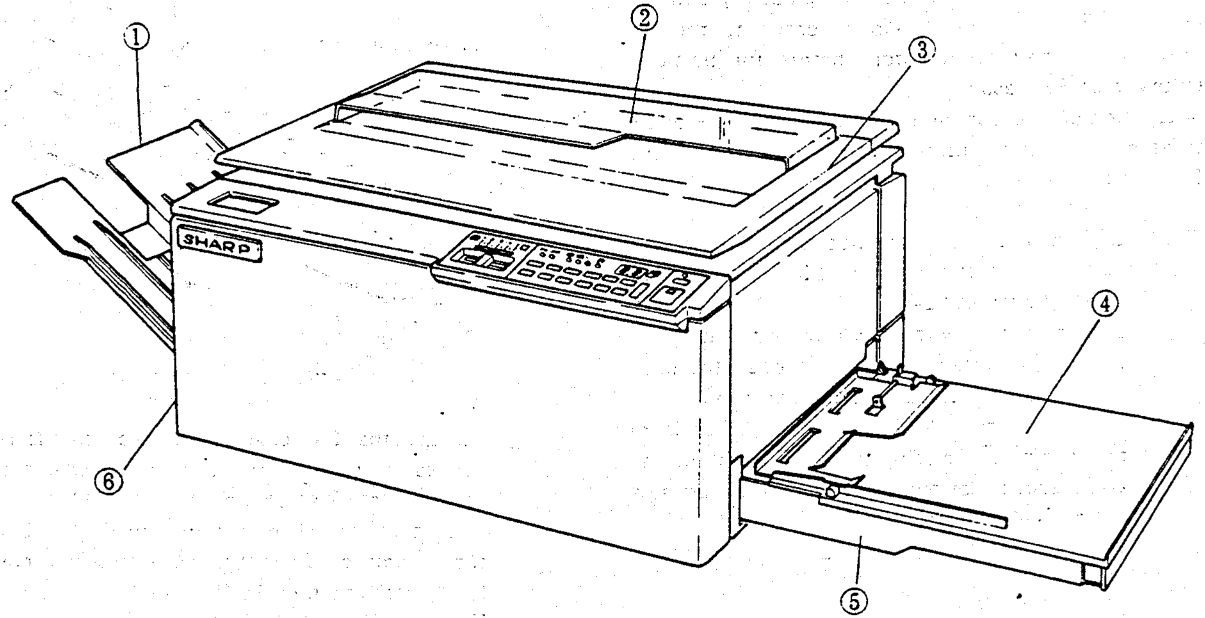
② The Toner Empty Lamp (TEL) must be ON at this time. If not, rotate the toner sensor adjusting screw clockwise until TEL is ON.

③ Slowly rotate the toner sensor adjusting screw counterclockwise is small increments until TEL starts to flash. Continue to rotate the adjusting screw in small increments until TEL is just OFF.

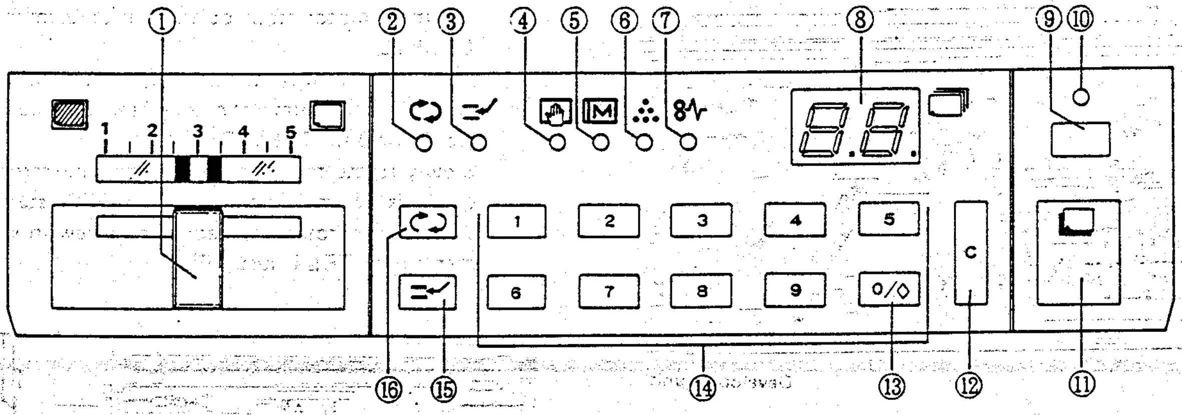

B A
B A
(Front frame side)
Toner sensor.
Developing level adjusting screw

[4] APPEARANCE AND INTERNAL STRUCTURE OF THE SF-755

1. Appearance



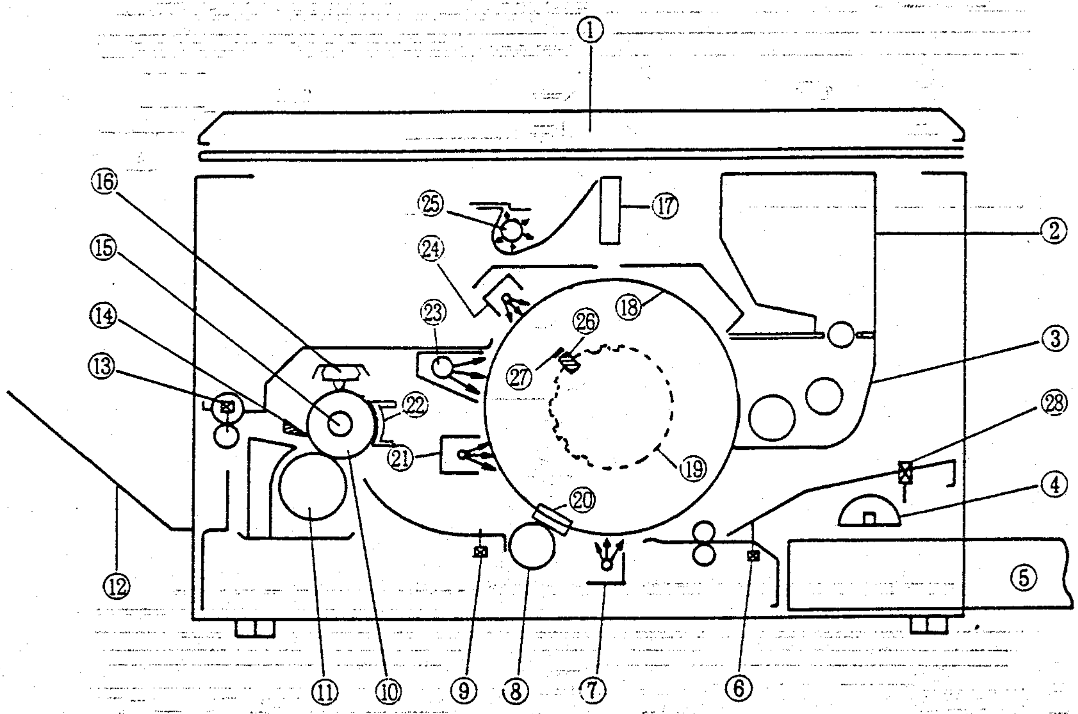
①	Tray	②	Original stacker	③	Original cover
④	Manual feed table (cassette cover)	⑤	Cassette	⑥	POWER switch



①	▨-△-☐	Exposure control lever	②	●	REPEAT indicator (REL on)
③	●	PAUSE indicator (PL on)	④	✋	MANUAL mode indicator (MFL on)
⑤	M	MASTER indicator (MPL on)	⑥	∴	TONER indicator (TEL on)
⑦	8∿	MISFEED indicator (MISSL blink)	⑧	88	MULTICOPY display
⑨	⏻	SAVE POWER key	⑩	●	POWER SAVE indicator (PDPL blink)
⑪	☐	PRINT switch (on when ready for copy and blinks when maintenance period is reached)			
⑫	C	CLEAR key	⑬	0/◇	READ/0 key
⑭	1 2 3 4 5 6 7 8 9 0/◇	COPY NUMBER set key	⑮	=✓	PAUSE key
⑯	⟲	REPEAT key			

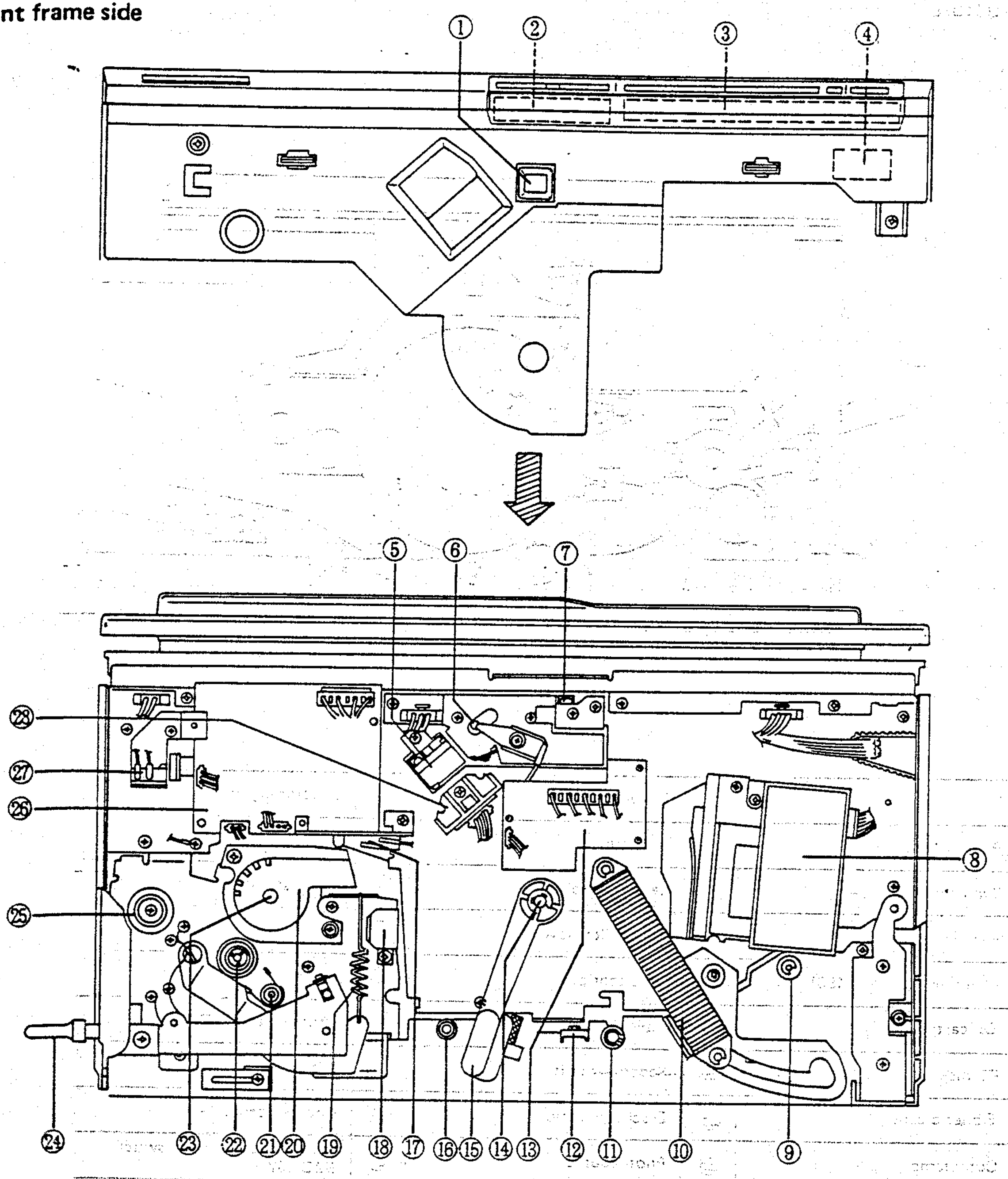
NOTE: Display 2, 3, and 8 will go out in 2 minutes after copying ends.

2. Internal structure



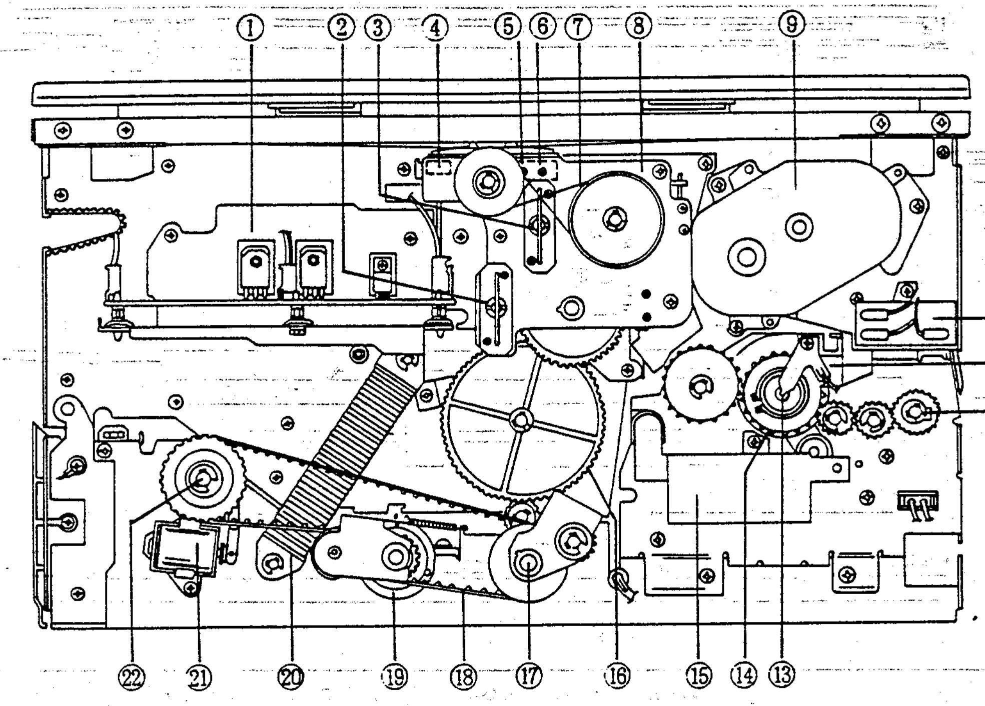
①	Table	②	Toner box	③	Developing unit
④	Paper feed roller	⑤	Cassette	⑥	Paper entry sensor (MS1)
⑦	Transfer corona (−)	⑧	Separator roller	⑨	Paper separation sensor (MS2)
⑩	Heat roller (upper)	⑪	Heat roller (lower)	⑫	Tray
⑬	Paper exit sensor (MS3)	⑭	Separator pawl	⑮	Heater lamp
⑯	Oil cartridge	⑰	Fiber optics lens	⑱	Drum (master: OPC)
⑲	PT disk	⑳	Separator unit	㉑	Discharge corona (+)
㉒	Roller cleaner	㉓	Discharge lamp	㉔	Charge corona (−)
㉕	Copy lamp	㉖	Photocoupler	㉗	Master counter reset switch (MCRSW)
㉘	Manual feed mode sensor (MS4)				

3. Front frame side



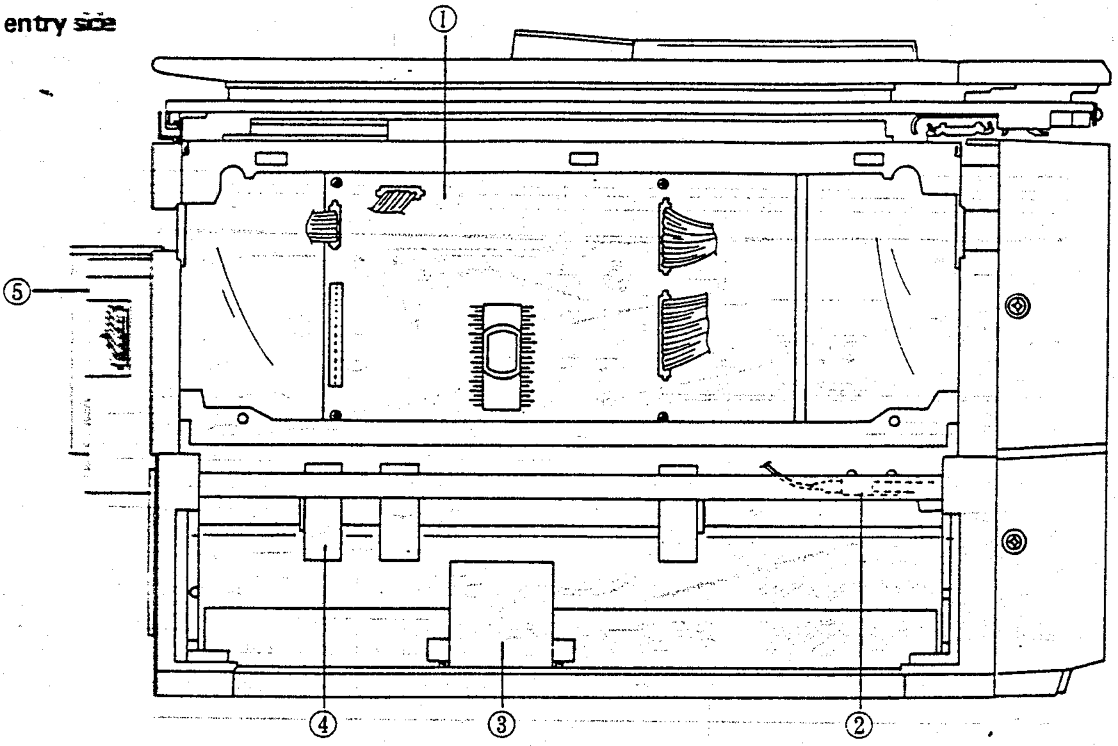
①	Misfeed reset switch (MFRSW)	②	Exposure control lever	③	Operation PWB
④	PRINT switch (PSW)	⑤	Charge corona (−)	⑥	Copy lamp
⑦	Optical unit	⑧	Developing unit	⑨	Paper feed roller shaft
⑩	Spring balancer	⑪	Paper stop roller shaft	⑫	Transfer corona (−)
⑬	Relay PWB	⑭	Drum shaft	⑮	Manual drum lever
⑯	Separator roller shaft	⑰	Discharge lamp unit	⑱	Discharge corona (+)
⑲	Separator roller shaft	⑳	Electrode holder F	㉑	Heat roller cleaning roller shaft
㉒	Lower heat roller shaft	㉓	Heater lamp	㉔	Roller tension lever (power switch)
㉕	Paper delivery roller knob	㉖	CL-Reg PWB	㉗	Front exterior sensor (DSW)
㉘	PT ass'y				

4. Rear frame side



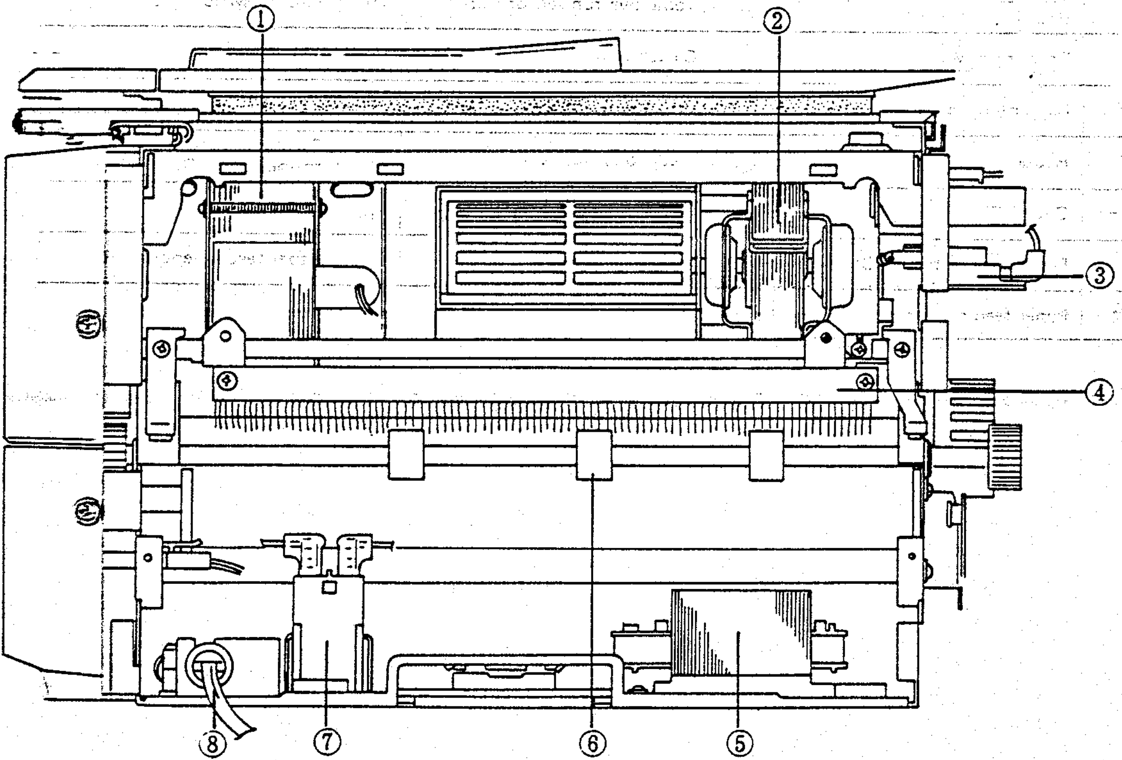
①	DC Power PWB	②	Table return solenoid (TRS)	③	Table feed solenoid (TFS)
④	Table start position sensor (MS5)	⑤	Table overrun sensor (MS7)	⑥	PSC on switch (MS6)
⑦	Table drive wire	⑧	Clutch unit	⑨	Gearbox
⑩	Main motor capacitor	⑪	Electrode holder R	⑫	Paper delivery roller shaft
⑬	Heater lamp	⑭	Heat roller (upper)	⑮	Discharge high voltage transformer (DHVG)
⑯	Gear 70T	⑰	Separator roller shaft	⑱	Timing belt
⑲	Paper stop clutch (PSC)	⑳	Spring balancer	㉑	Paper feed solenoid (PFS)
㉒	Paper feed roller shaft				

5. Paper entry side



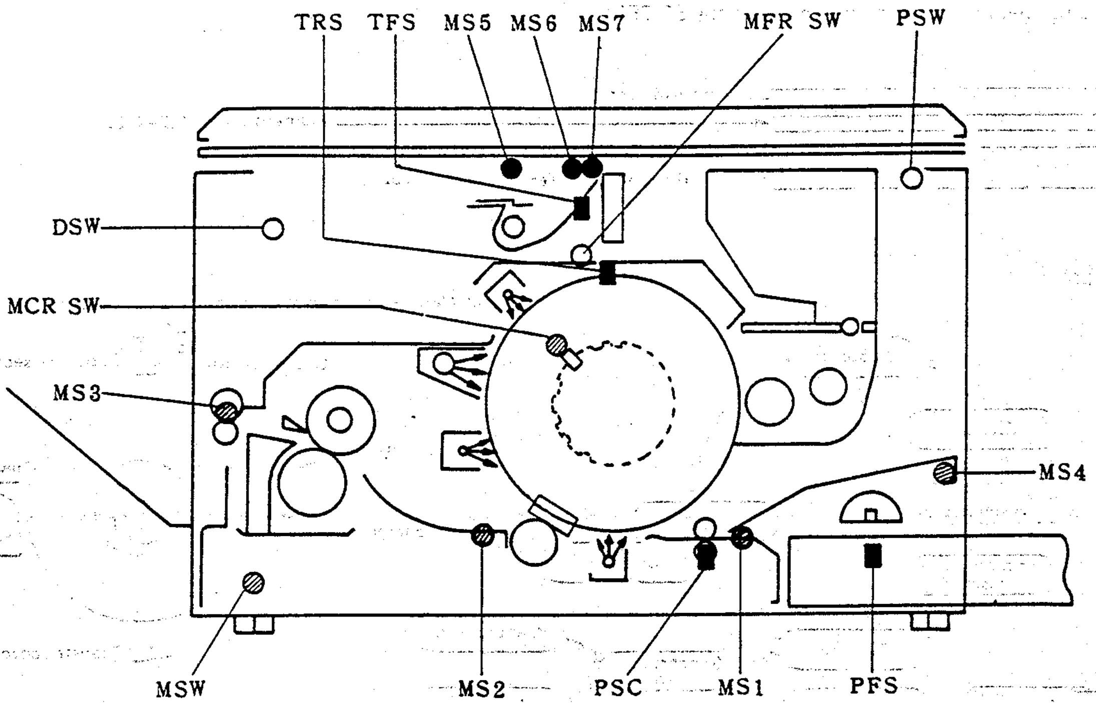
①	Main PWB	②	Manual mode sensor (MS4)	③	Cassette sliding arm
④	Paper feed roller	⑤	Developing unit		

6. Paper exit side



①	Main motor (MM)	②	Cooling fan motor (CFM)	③	Doorswitch (DSW)
④	Discharge brush	⑤	Power transformer	⑥	Paper delivery roller
⑦	Power relay (PR)	⑧	AC cord		

7. Switches, solenoids, magnetic clutches

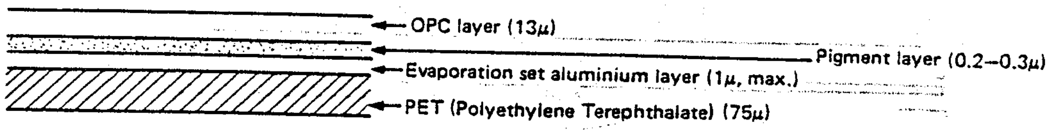


○: Front frame side ●: Middle frame side ■ ●: Rear frame side

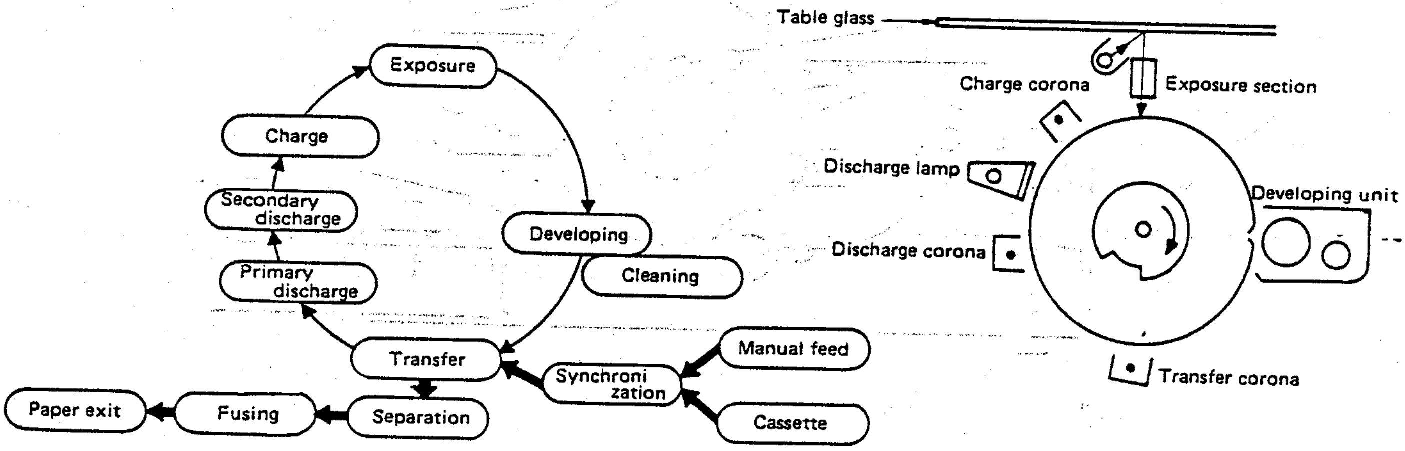
Signal name	Type	Function
MS1	Reed switch	Paper entry sensor
MS2	Reed switch	Paper separation sensor
MS3	Reed switch	Paper exit sensor
MS4	Reed switch	Manual mode sensor switch
MS5	Microswitch	Table start position sensor
MS6	Microswitch	PSC activating switch (for leading edge registration adjustment)
MS7	Microswitch	Table overrun sensor
MCRSW	Reed switch	Master counter memory reset switch
DSW	Microswitch	Open front cover sensing switch (OFF when open)
MSW	Microswitch	Power on/off switch
MFRSW	Pushswitch	Misfeed reset switch
PSW	Microswitch	Print switch
PSC	Magnetic clutch	Paper stopper clutch (active when MS6 is on)
PFS	Solenoid	Paper feed solenoid
TRS	Solenoid	Table return solenoid
TFS	Solenoid	Table feed solenoid

[5] COPY PROCESS

An O.P.C. (Organic Photo conductor) master is used for the photo sensing medium to form the image in the SF-755

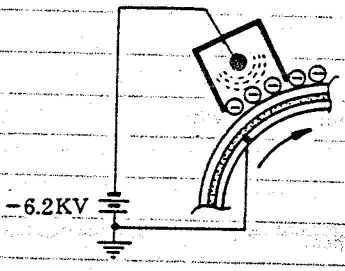

OPC layer (13μ)
Pigment layer (0.2–0.3μ)
Evaporation set aluminium layer (1μ, max.)
PET (Polyethylene Terephthalate) (75μ)

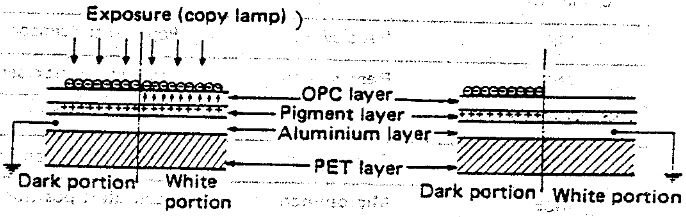
1. Block diagram


Exposure
Charge
Secondary discharge
Primary discharge
Developing
Cleaning
Transfer
Synchroni zation
Manual feed
Cassette
Paper exit
Fusing
Separation
Table glass
Charge corona
Exposure section
Discharge lamp
Developing unit
Discharge corona
Transfer corona

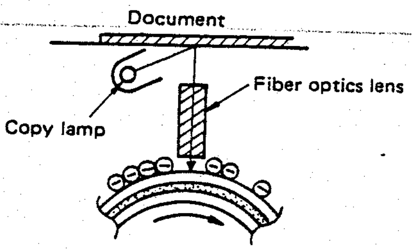
2. Basic copying process

Step 1: Charge (–6.2KVDC, 0.62mA)
Uniform negative charge is developed over the surface of the OPC master by the charge corona.

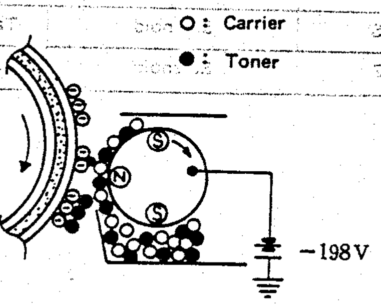



Exposure (copy lamp)
OPC layer
Pigment layer
Aluminium layer
PET layer
Dark portion
White portion
Dark portion
White portion

Step 2: (copy lamp, fiber optics lens)
Document image is projected over the OPC master through the optics lens by means of the copy lamp. This removes the negative charge on the exposed portion of the master. It decreases the resistance on the respective exposed OPC area and forms the electrostiatic latent image on the master surface.

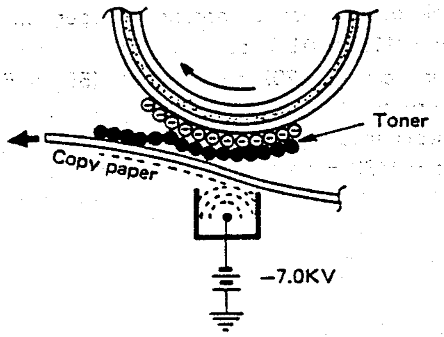

Document
Fiber optics lens
Copy lamp

Step 3: Developing (-198V bias)
The electrostatic latent image on the master surface is developed into a visible image with toner. Since the two-component magnetic bursh developing method is used for the SF-755, the bias voltage of -198V is incorporated to prevent background.

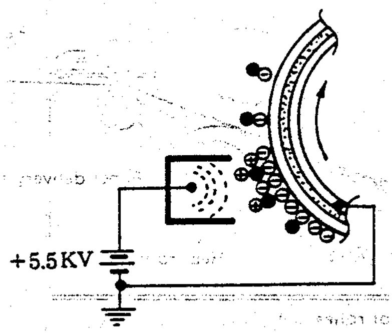

○ : Carrier
● : Toner
S
N
S
–198V

Step 4: Transfer (−7.0KVDC, 0.33mA)
The visible image on the master surface is transferred to the copy paper.

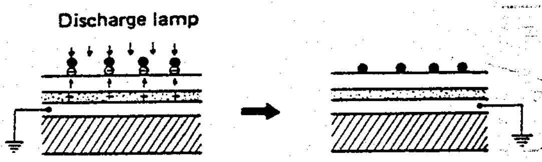
A negative potential is added to the reverse side of the copy paper from the transfer corona to transfer the toner on the master surface to the copy paper. Transfer efficiency is 70 to 80%.



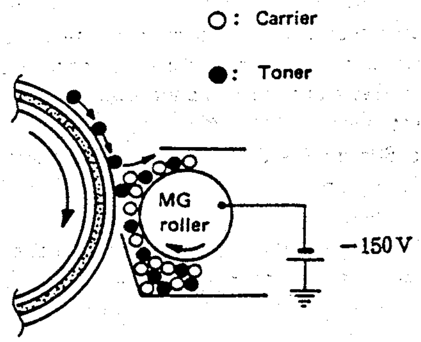
Step 5: Discharge (+5.5KVDC, 0.18mA discharge corona)
The negative charge on the master surface is removed by the positive potential from the discharge corona. The attraction power of the toner on the master surface becomes weaker.



Step 6: Discharge (discharge lamp)
Light from the discharge lamp is casted over the master surface to abate the resistance on the OPC layer so as to remove the residual charge.



Step 7: Cleaning (−150V bias)
A cleaning bias potential of −150V is added to the developing unit to collect the toner (20~30%) remaining on the master surface.



[6] PAPER FEED UNIT, PAPER SEPARATOR UNIT

1. Outline of the paper feed unit

The paper feed unit consists of the paper feed solenoid (PFS), paper feed rollers, and the paper feed clutch mechanism by which the paper feed action is controlled.

Range of cassette and manual paper supply

(1) Cassette feed
56 to 80g/m² (14.9 to 21.3 lbs) ... standard, economy, and color paper

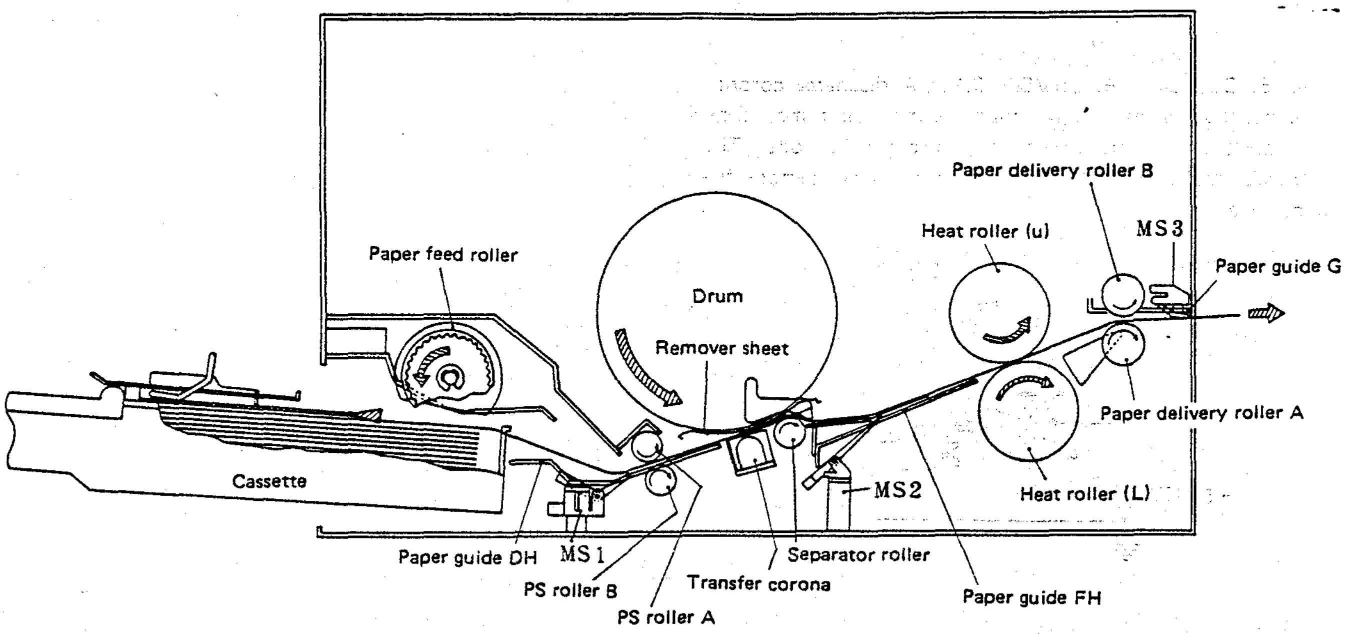
(2) Manual feed
52 to 128g/m² (13.9 to 34.1 lbs) ... paper of 105 to 128g/m² (28 to 34.1 lbs) must be smaller than A4 (8½" x 11") size.

(3) Range of special paper usable (manual feed only)

- Second original ... 52 to 70g/m² (13.9 to 18.7 lbs)
- Overhead projector paper ... 70 to 128g/m² (18.7 to 34.1 lbs)
- Offset master ... about 90 to 105g/m² (24 to 28 lbs) of A4 (8½" x 11") size.
- Label and post card ... 70 to 128g/m² (18.7 to 34.1 lbs)
- Rough paper (such as notebook paper) ... 52 to 70g/m² (13.9 to 18.7 lbs)
- Library card ... 209 to 260g/m² (56 to 69 lbs)

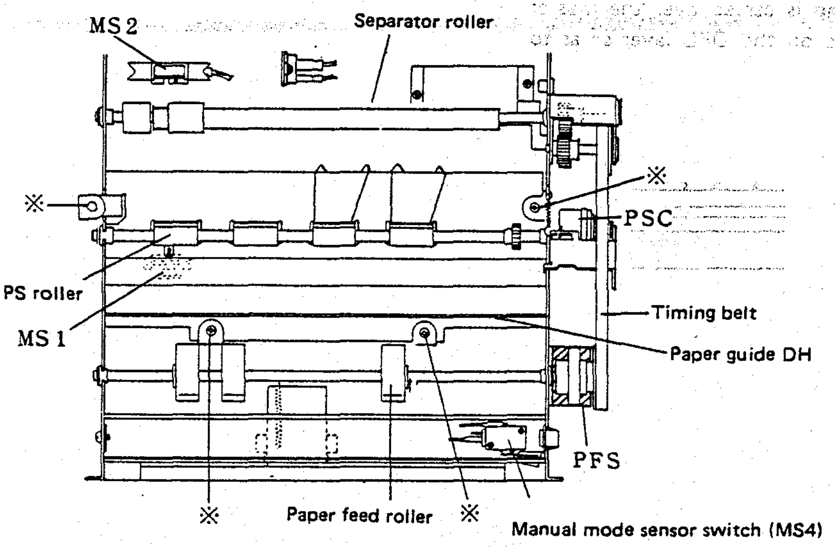
Paper supply route

cassette → paper feed rollers → MS1 → PS rollers → transfer → separation → MS2 → heat roller → paper delivery roller → MS3



Paper delivery roller B
Heat roller (u)
MS3
Paper feed roller
Paper guide G
Drum
Remover sheet
Paper delivery roller A
Cassette
MS2
Heat roller (L)
Paper guide DH
MS1
Separator roller
PS roller B
Transfer corona
Paper guide FH
PS roller A

2. Main parts positions

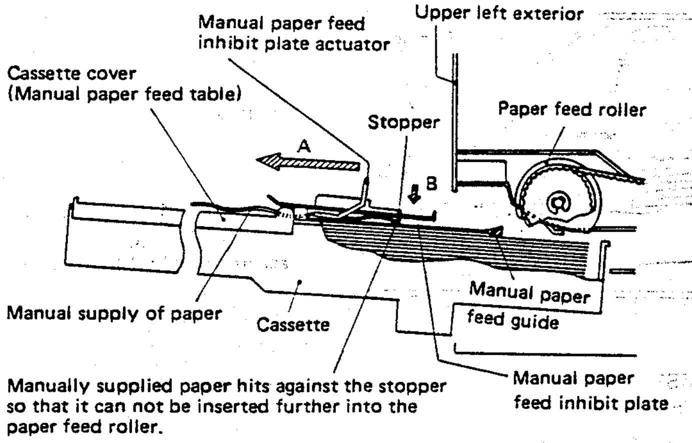


MS2
Separator roller
※
※
PSC
PS roller
MS1
Timing belt
Paper guide DH
PFS
※
Paper feed roller
※
Manual mode sensor switch (MS4)

3. Paper supply actions

(1) Cassette supply

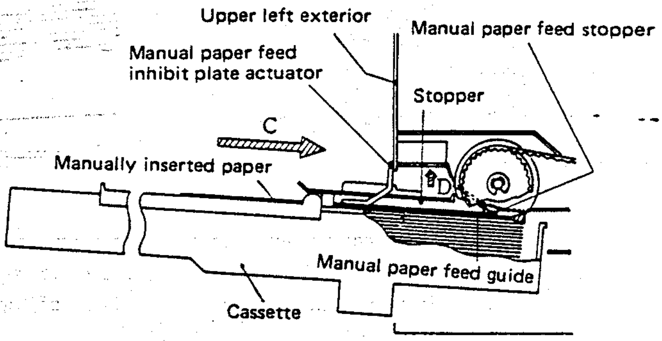
During cassette feeding the cassette cover (manual paper feed table) is located to the arrowhead A as shown in the figure below with the manual feed inhibit plate actuator in a free position and the manual paper feed inhibit plate at the lower position B so that insertion of paper is blocked by the stopper. As manual paper feed is enabled in this condition, depression of the PRINT switch causes the removal of paper from the cassette.


Manual paper feed inhibit plate actuator
Upper left exterior
Cassette cover (Manual paper feed table)
Stopper
Paper feed roller
A
B
Manual paper feed guide
Manual supply of paper
Cassette
Manual paper feed inhibit plate

Manually supplied paper hits against the stopper so that it can not be inserted further into the paper feed roller.

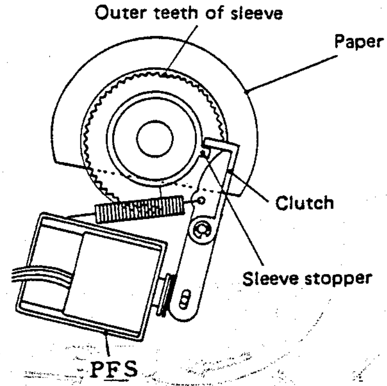
(2) Manual supply

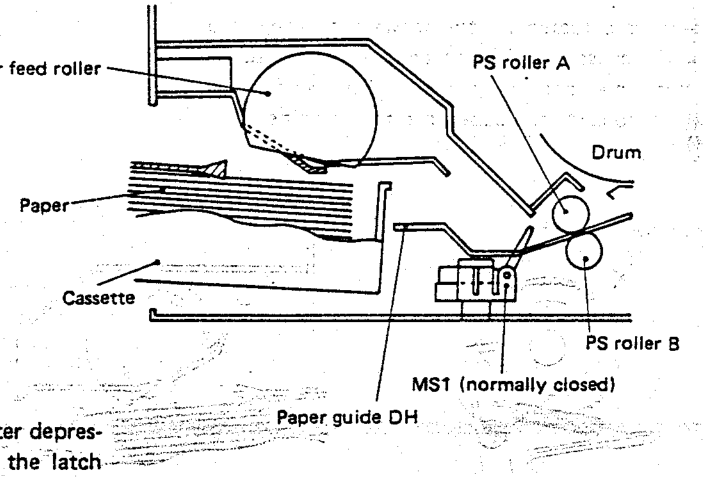
During manual feeding the cassette cover (manual paper feed table) is located to the arrowhead C as shown in the below with the manual feed inhibit plate actuator in contact with the upper left exterior and the manual paper feed inhibit plate at the upper position D and the stopper open. When paper is inserted in this condition, the paper passes under the stopper and stops at the point of the manual paper feed stopper. Depression of the PRINT switch causes the paper on the manual paper feed guide to enter the machine by means of the paper feed roller. Since the manual paper feed guide is over the paper in the cassette when the cassette cover (manual paper feed table) is in the manual paper feed position, paper will not be fed from the cassette.


Upper left exterior
Manual paper feed stopper
Manual paper feed inhibit plate actuator
Stopper
C
D
Manually inserted paper
Manual paper feed guide
Cassette

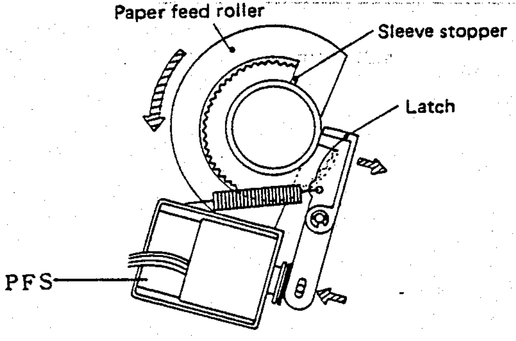
(3) Action of paper feed roller

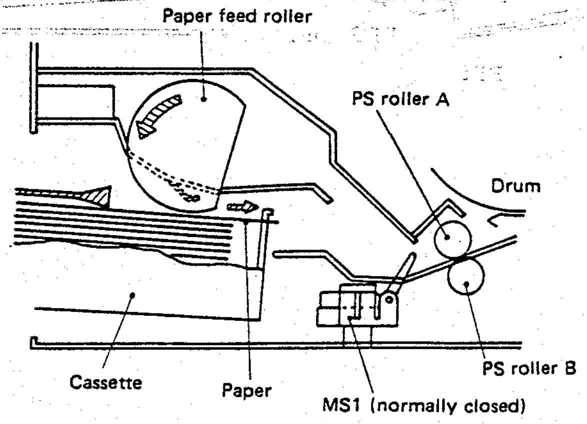
① Illustration below shows state of paper feed clutch, clutch sleeve, and the paper feed rollers when paper is not being supply.


Outer teeth of sleeve
Paper feed roller
Clutch
Sleeve stopper
PFS

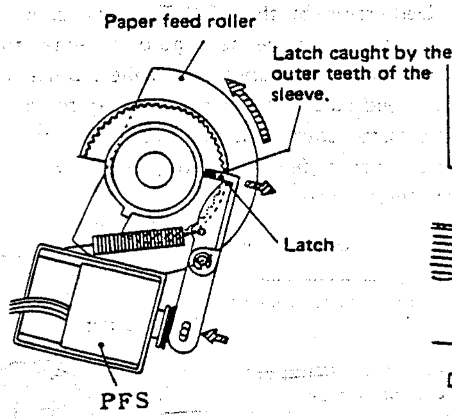

PS roller A
Drum
Paper
Cassette
PS roller B
MS1 (normally closed)
Paper guide DH

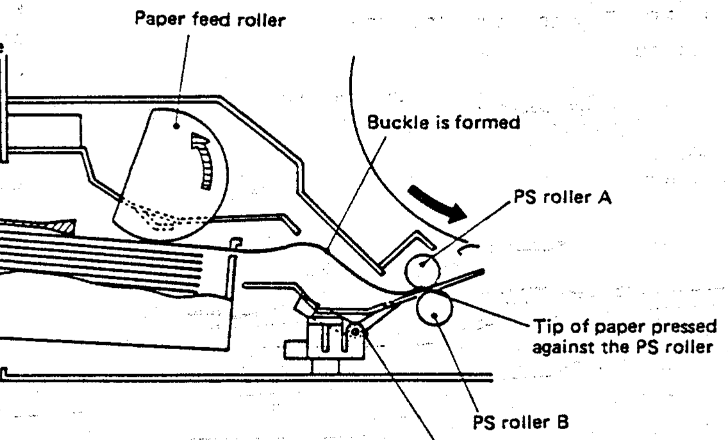
② The PFS opens for a period of 0.1 second after depression of the Print switch, which disengages the latch from the sleeve stopper. This causes the paper feed roller to rotate and starts supplying paper.


Paper feed roller
Sleeve stopper
Latch
PFS


Paper feed roller
PS roller A
Drum
Cassette
Paper
PS roller B
MS1 (normally closed)

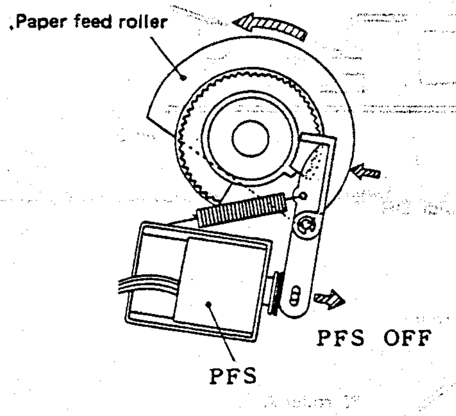
③ When the leading edge of the paper actuates MS1, it causes the PFS to operate again 0.05 seconds later. The latch is then caught by an outer tooth of the sleeve and the paper feed roller stops rotating at the position shown in the figure below. Since there is a time lag until the paper feed roller stops after the activation of MS1 by the leading edge of the paper, the paper is slightly advanced. The PS roller at this point is not moving because the PSC has not been activated as yet. So, a buckle is formed in the paper because the paper is held between the paper feed roller and the PS roller, which will act to push the paper edge against the PS roller.

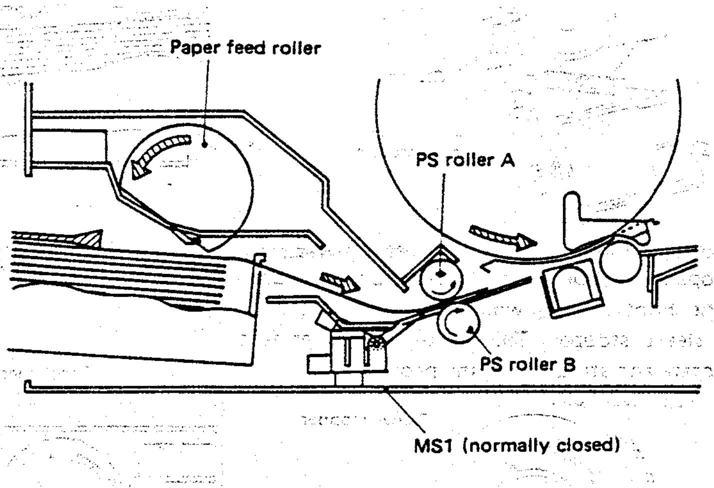

Paper feed roller
Latch caught by the outer teeth of the sleeve.
Latch
PFS


Paper feed roller
Buckle is formed
PS roller A
Tip of paper pressed against the PS roller
PS roller B
MS1 (normally closed)

When the leading edge of the paper actuates MS1, it causes the PFS to operate 0.05 second later. The latch is then caught by an outer tooth of the sleeve and the paper feed roller stops rotating.

④ When MS6 is actuated by the forward movement of the table, it causes the PSC to actuate. PFS is turned off at this time, and the paper feed roller starts to rotate again, to carry the paper into the machine.


Paper feed roller
PFS OFF
PFS

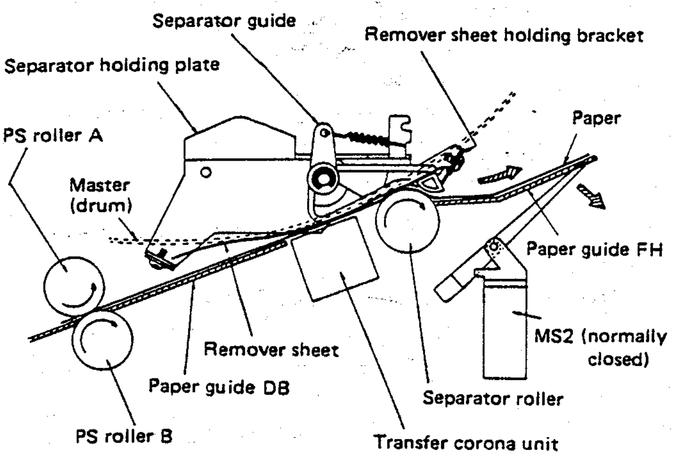

Paper feed roller
PS roller A
PS roller B
MS1 (normally closed)

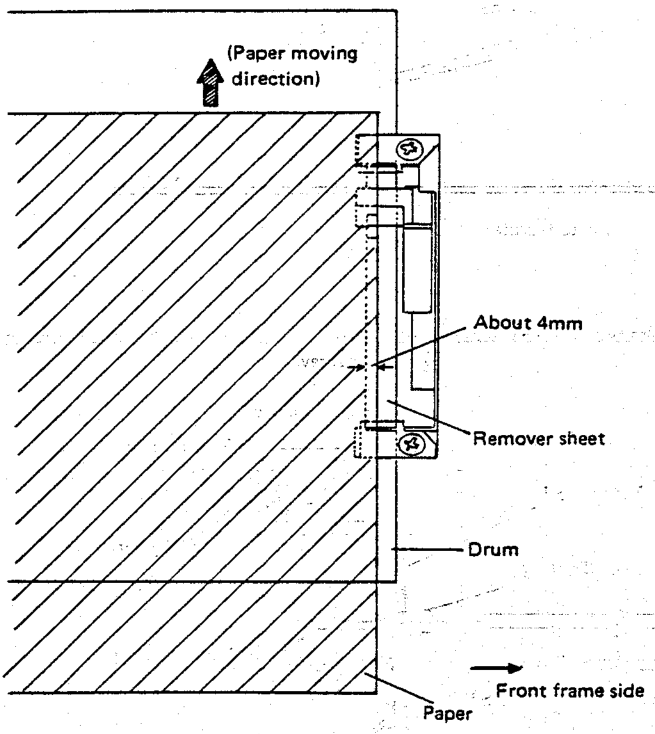
4. Outline of the separator unit

The separatqr unit is used to remove the copy paper from the drum after fransfer has occured

(1) Action of separator unit

The separator unit which is located under the drum on the front frame side, and the romover sheet is in contact with the master at all times. When 4mm of paper pass underneath the remover sheet, the paper is then separated form the master. The paper then goes into the fusing section after acuating MS2.

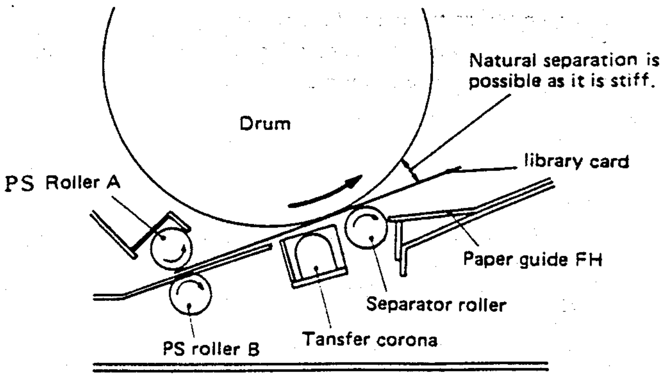

Separator guide
Remover sheet holding bracket
Separator holding plate
PS roller A
Paper
Master (drum)
Paper guide FH
MS2 (normally closed)
Remover sheet
Paper guide DB
Separator roller
PS roller B
Transfer corona unit

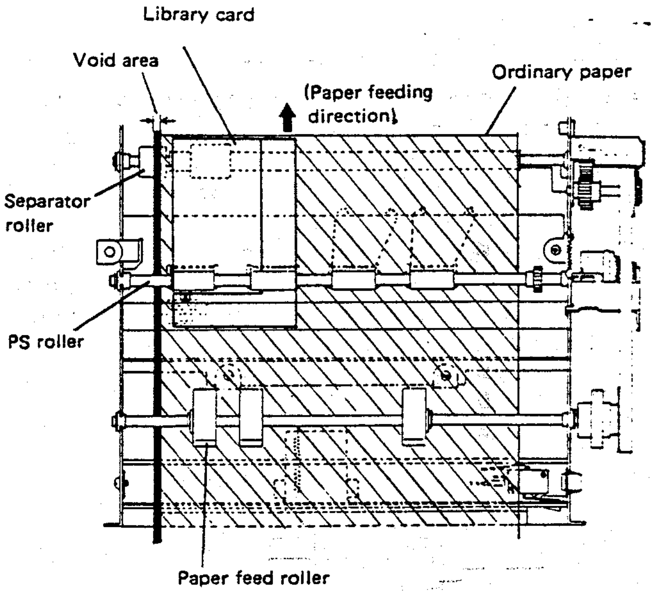

(Paper moving direction)
About 4mm
Remover sheet
Drum
Front frame side
Paper

(View of the separator unit from under the drum)

(2) Separation of library card

Separation of library card can be attained without aid of the separator unit as they are stiff. This allows copying without void area.


Natural separation is possible as it is stiff.
Drum
library card
PS Roller A
Paper guide FH
Separator roller
PS roller B
Tansfer corona

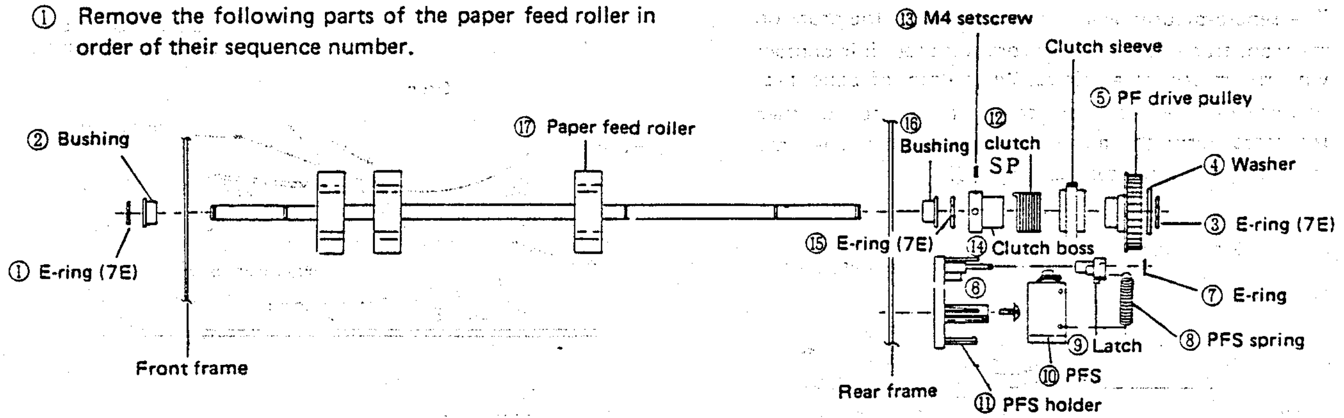

Library card
Void area
(Paper feeding direction)
Ordinary paper
Separator roller
PS roller
Paper feed roller

5. Major parts disassembly and assembly

Remove the front exterior, right side lower exterior, rear side upper exterior, and rear side lower exterior.

(1) Disassembly of the paper feed roller

① Remove the following parts of the paper feed roller in order of their sequence number.


② Bushing
① E-ring (7E)
Front frame
⑰ Paper feed roller
⑬ M4 setscrew
Clutch sleeve
⑤ PF drive pulley
⑯ Bushing
⑫ clutch SP
④ Washer
③ E-ring (7E)
⑮ E-ring (7E)
⑭ Clutch boss
⑧
⑦ E-ring
⑧ PFS spring
⑨ Latch
⑩ PFS
Rear frame
⑪ PFS holder

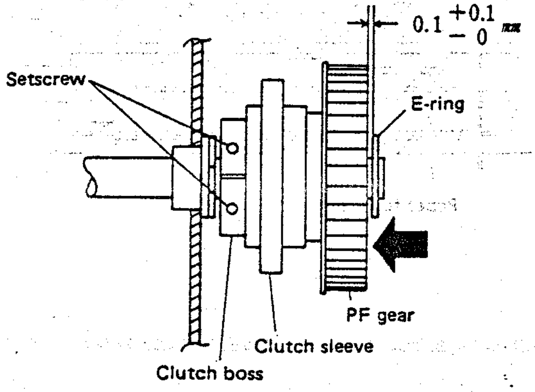
(2) Paper feed roller and PFS locations

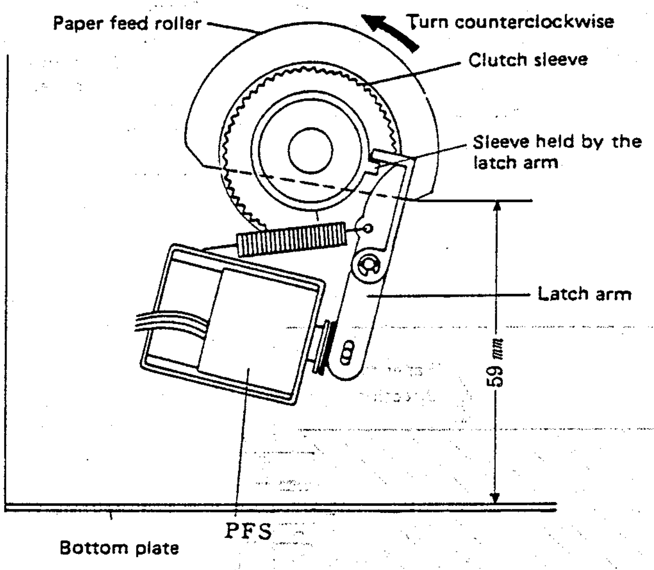
Angle of the paper feed roller (height of the roller from the base plate : 59 mm)

① Turn the paper feed gearwheel untill the latch engages with the protrusion inside the clutch sleeve, hold in this position.

② Place the paper feed roller in the position shown below.

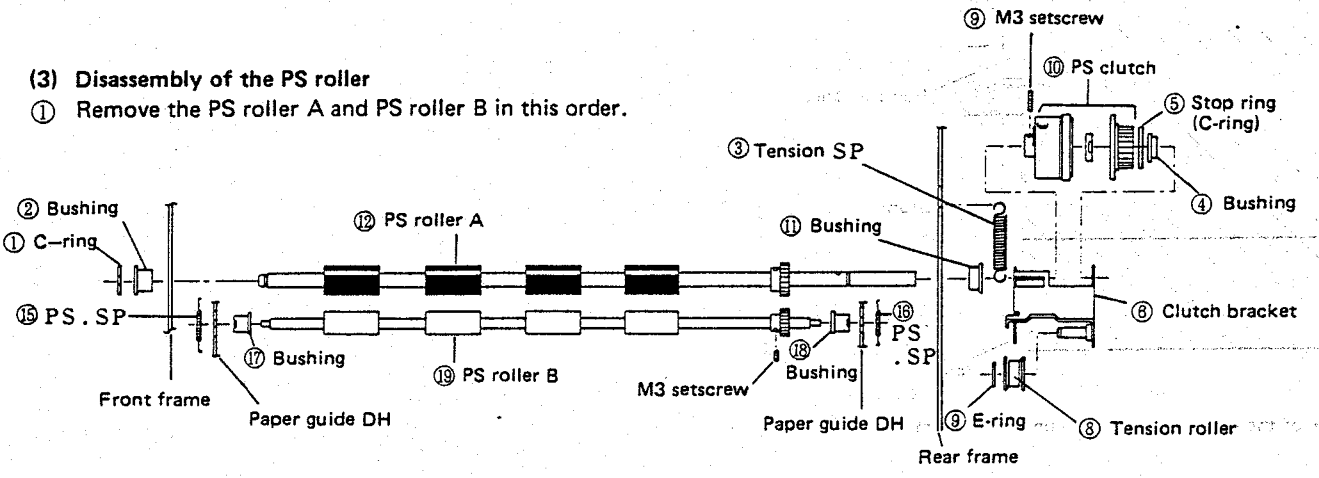
③ Push the clutch boss towards the arrow direction, then secure it with setscrews, without moving the paper feed roller.

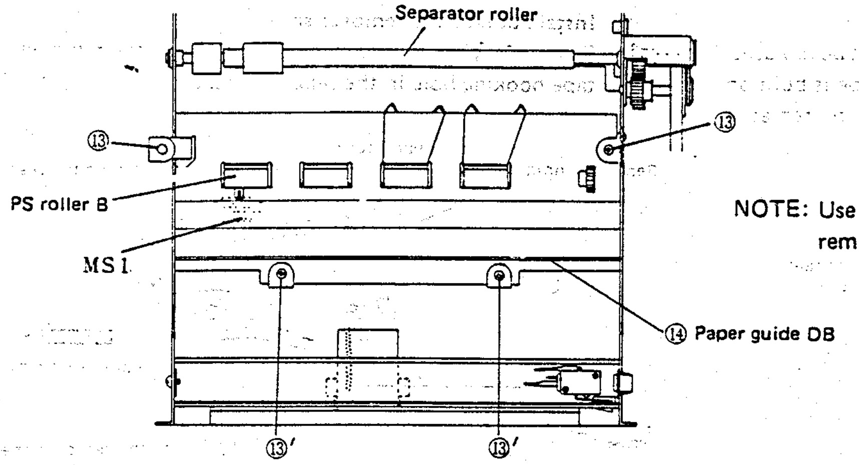

0.1 +0.1 −0 mm
Setscrew
E-ring
PF gear
Clutch sleeve
Clutch boss


Paper feed roller
Turn counterclockwise
Clutch sleeve
Sleeve held by the latch arm
Latch arm
59 mm
PFS
Bottom plate

(3) Disassembly of the PS roller

① Remove the PS roller A and PS roller B in this order.

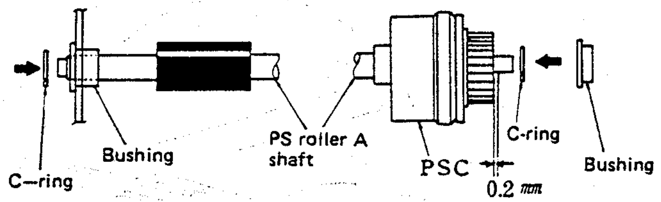

⑨ M3 setscrew
⑩ PS clutch
⑤ Stop ring (C-ring)
③ Tension SP
④ Bushing
② Bushing
① C-ring
⑫ PS roller A
⑪ Bushing
⑮ PS . SP
⑰ Bushing
⑲ PS roller B
M3 setscrew
⑱ Bushing
⑯ PS . SP
⑥ Clutch bracket
Front frame
Paper guide DH
Paper guide DH
⑨ E-ring
⑧ Tension roller
Rear frame


Separator roller
⑬
⑬
PS roller B
MS 1
⑭ Paper guide DB
⑬'
⑬'

NOTE: Use an allen wrench to remove screw ⑬' after removing the paper feed roller.

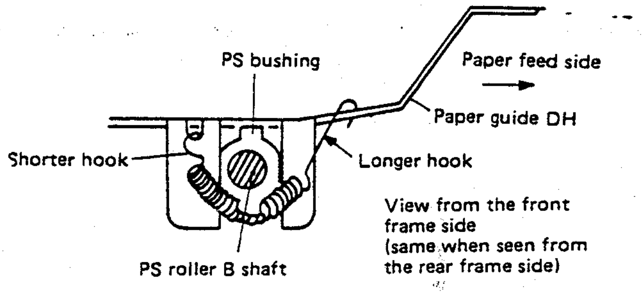
(4) PS roller A shaft and C-ring locations

Push both C-rings on PS roller shaft A in the direction of the arrows until the clearance between the C-ring and the PSC is 0.2 mm


Bushing
PS roller A shaft
C-ring
C–ring
PSC
0.2 mm
C-ring
Bushing

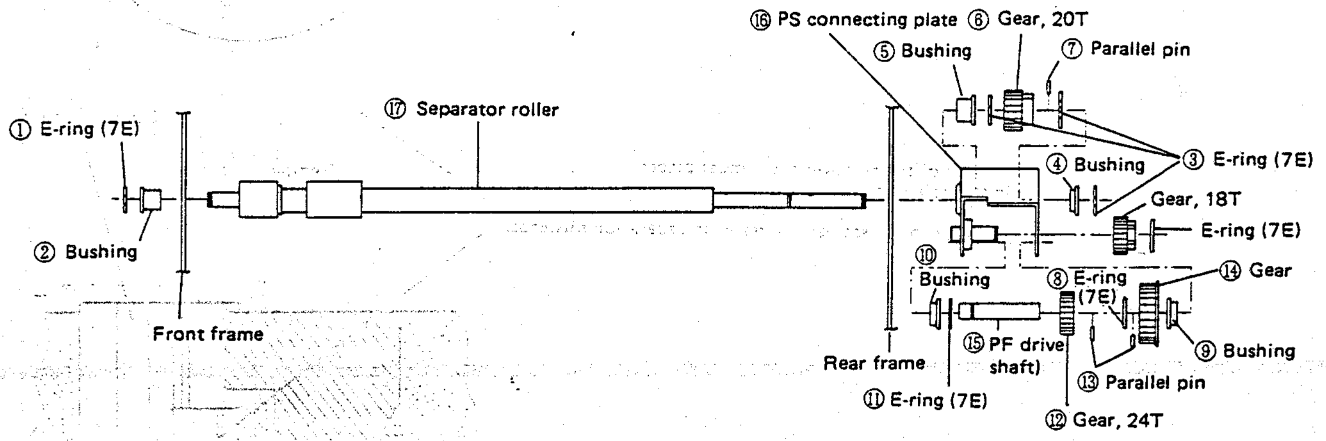
(5) PS spring installing method

Pay attention for the direction of the PS spring as it has hooks of different sizes. (See the figure below.)


PS bushing
Paper feed side
Paper guide DH
Shorter hook
Longer hook
View from the front frame side (same when seen from the rear frame side)
PS roller B shaft

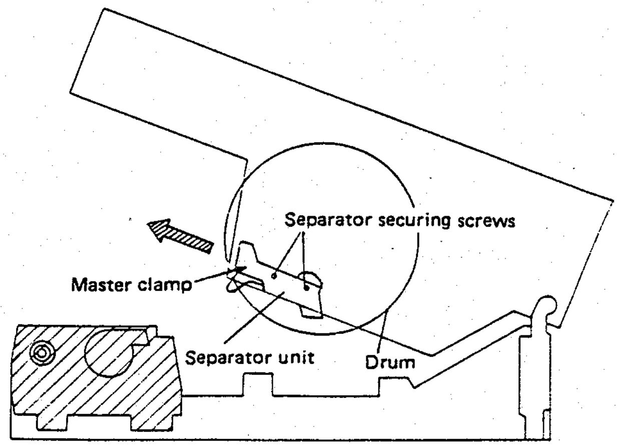
(6) Disassembly of the separator roller

Remove the separator roller in this order.


⑯ PS connecting plate
⑥ Gear, 20T
⑤ Bushing
⑦ Parallel pin
⑰ Separator roller
① E-ring (7E)
③ E-ring (7E)
④ Bushing
Gear, 18T
E-ring (7E)
② Bushing
⑩ Bushing
⑧ E-ring (7E)
⑭ Gear
Front frame
⑮ PF drive shaft)
⑨ Bushing
Rear frame
⑬ Parallel pin
⑪ E-ring (7E)
⑫ Gear, 24T

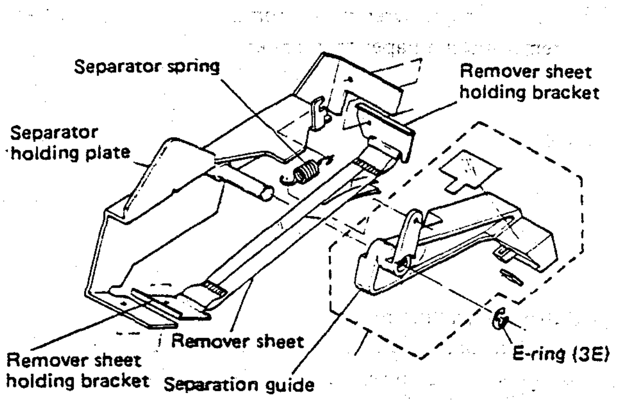
(7) Removal of the separator unit

① Remove the front exterior.
② Remove the operation panel.
③ Open the clam shell mechanism.
④ Rotate the drum until the master clump is over the separator unit.
⑤ Remove two screws securing the separator unit.
⑥ Pull out the separator unit towards the arrowhead.


Separator securing screws
Master clamp
Separator unit
Drum

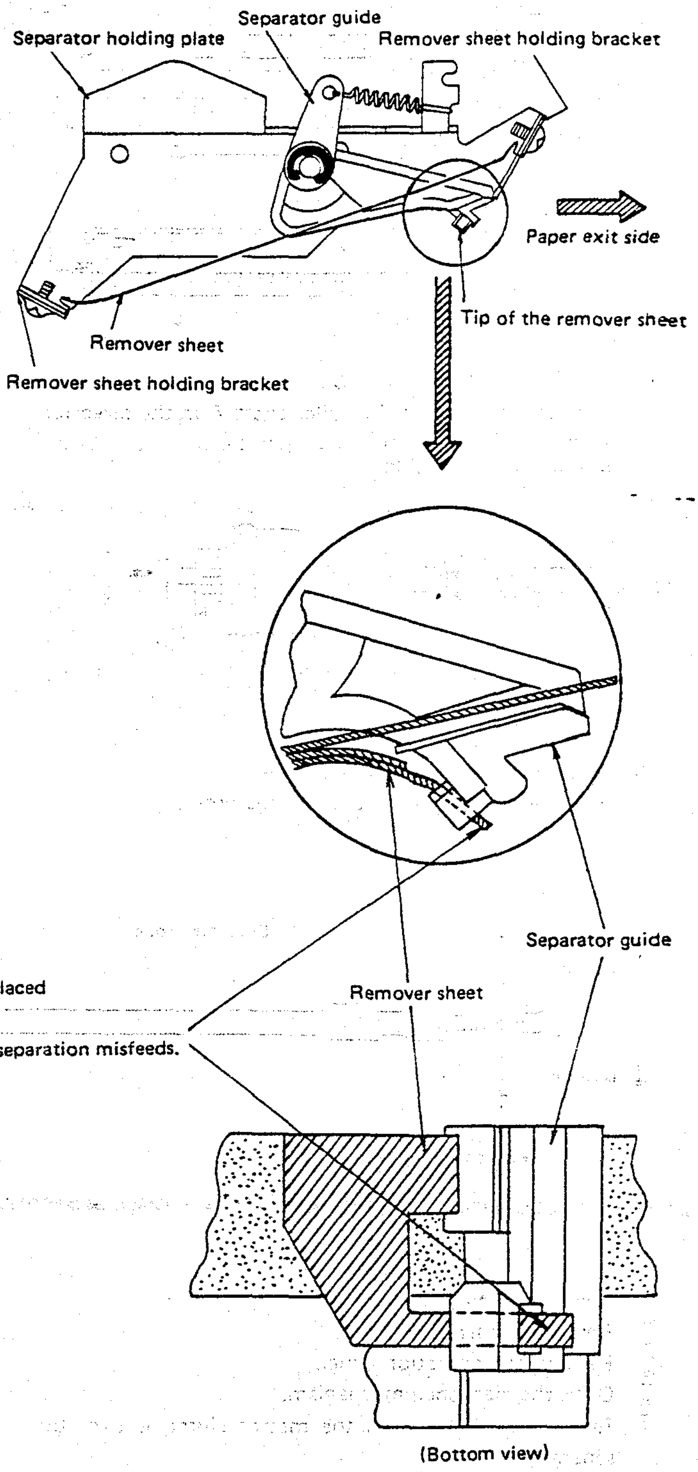
(8) Disassembly of the separator unit

Remover sheet and the separator guide must be replaced after 40,000 copies. Since the remover tape is built on the same body with the bracket, it has to be replaced as an assembly.


Separator spring
Remover sheet holding bracket
Separator holding plate
Remover sheet
Remover sheet holding bracket
Separation guide
E-ring (3E)

(9) Installation of the remover sheet

Slide the tip of the remover sheet through the remover tape hooking hole in the separator guide.


Separator guide
Separator holding plate
Remover sheet holding bracket
Paper exit side
Tip of the remover sheet
Remover sheet
Remover sheet holding bracket
Separator guide
Remover sheet
(Bottom view)

The tip of the remover sheet must placed in the hole of the separator guide.

If not properly set, is may result in separation misfeeds.

NOTE: To replace the separator unit rotate the drum until the master clamp is in front of the area where the separator unit should be located.

[7] HIGH VOLTAGE UNIT

1. Outline of the high voltage unit

There are three types of corona units used in the SF-755.

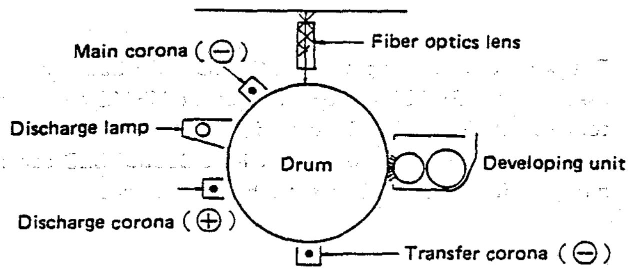
Main corona unit
Transfer corona unit
Discharge corona unit

The main corona is used to develop a uniform negative charge on the master.

The transfer corona is used to transfer the toned image on the master to the copy paper. High negative potential is added from the back of the copy paper.

The discharge corona is used to remove the residual charge on the master surface. A high positive potential is added by this corona.

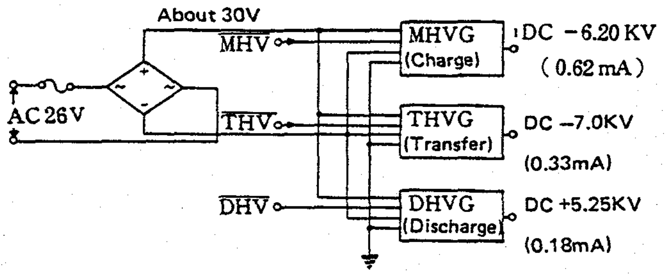
To prevent developer pull, a fault sensing circuit has been incorporated in the transfer high voltage transformer to interrupt copier operation if the machine experiences a loss of the THVG. (Example: Corona unit not properly inserted, or an open corona wire.)


Main corona (⊖)
Fiber optics lens
Discharge lamp
Drum
Developing unit
Discharge corona (⊕)
Transfer corona (⊖)

(1) Main corona high voltage transformer (MHVG): −6.2KVDC, 0.62mA
When the MHV signal is generated from the Main PWB, a negative charge is produced on the master.

(2) Transfer corona high voltage transformer (THVG): −7.0KVDC, 0.33mA
When the THV signal is generated from the Main PWB, toner on the master is transferred to the paper.

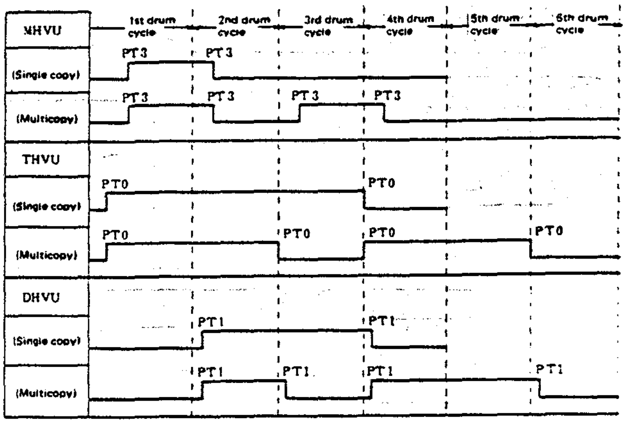
(3) Discharge corona high voltage transformer (DHVG): +5.25KVDC, 0.18mA
When the DHV signal is generated from the Main PWB, the residual charge on the master is reduced to facilitate cleaning.

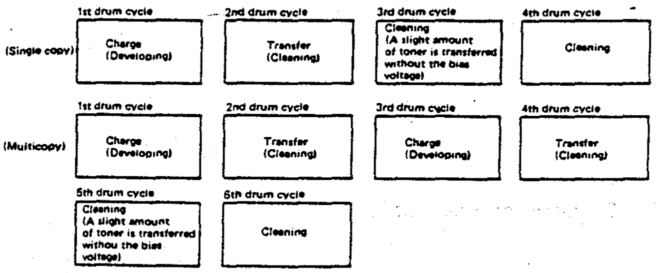

About 30V
MHV
AC 26V
THV
DHV
MHVG (Charge)
THVG (Transfer)
DHVG (Discharge)
DC −6.20 KV (0.62 mA)
DC −7.0KV (0.33mA)
DC +5.25KV (0.18mA)

NOTE: The reference value shown is for the output voltage of the high voltage transformer, not the output voltage for the DCD.

2. High voltage transformer operating timings

Each of corona units are controlled in a manner as illustrated below, in synchronization with the PT signal.



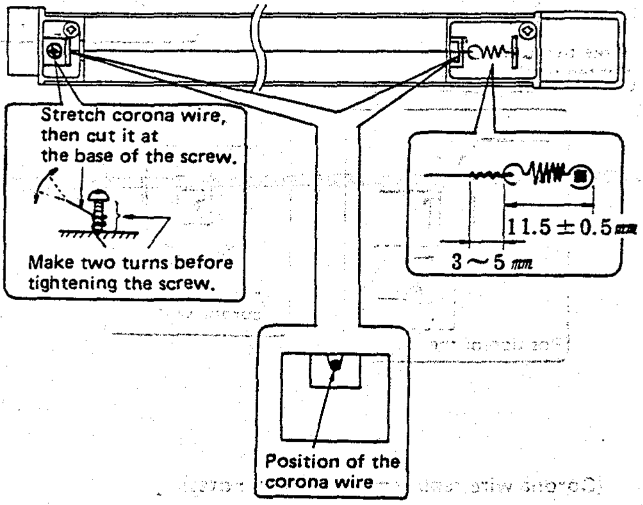

(Single copy)
1st drum cycle
Charge (Developing)
2nd drum cycle
Transfer (Cleaning)
3rd drum cycle
Cleaning (A slight amount of toner is transferred without the bias voltage)
4th drum cycle
Cleaning
(Multicopy)
1st drum cycle
Charge (Developing)
2nd drum cycle
Transfer (Cleaning)
3rd drum cycle
Charge (Developing)
4th drum cycle
Transfer (Cleaning)
5th drum cycle
Cleaning (A slight amount of toner is transferred withou the bias voltage)
6th drum cycle
Cleaning

3. Discharge lamp

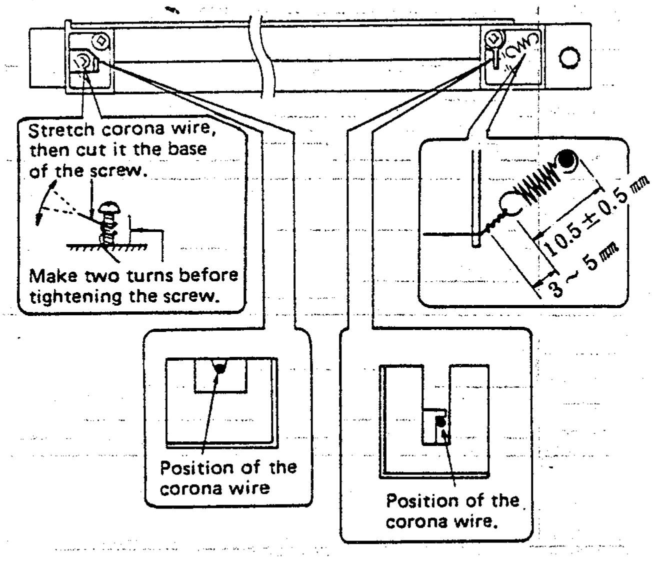
The discharge lamp is used to decrease the residual charge on the master to facilitate cleaning.

4. How to stretch corona wire

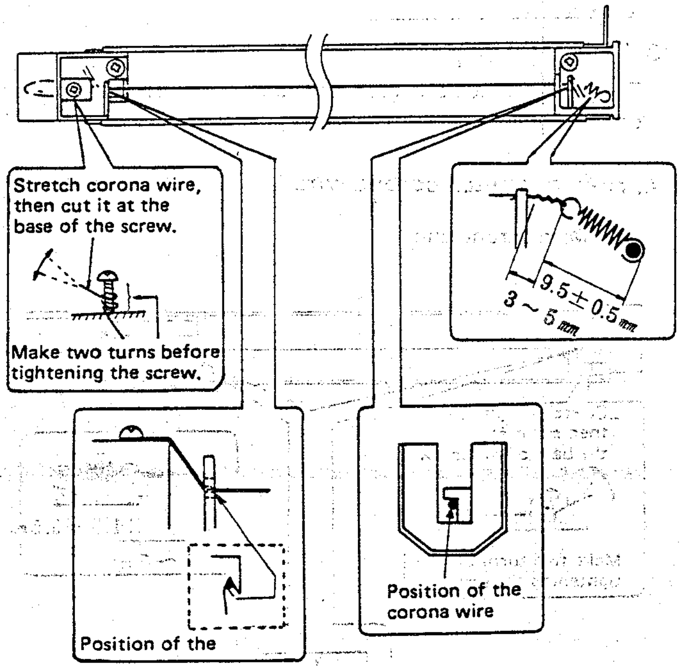
(1) Main corona unit


Stretch corona wire, then cut it at the base of the screw.
Make two turns before tightening the screw.
11.5±0.5㎜
3∼5㎜
Position of the corona wire

(2) Transfer corona unit

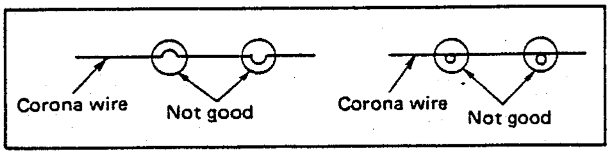

Stretch corona wire, then cut it the base of the screw.
Make two turns before tightening the screw.
10.5 ± 0.5 mm
3 ~ 5 mm
Position of the corona wire
Position of the corona wire.

(3) Discharge corona unit


Stretch corona wire, then cut it at the base of the screw.
Make two turns before tightening the screw.
9.5 ± 0.5 mm
3 ~ 5 mm
Position of the
Position of the corona wire

(Corona wire replacement caution notes)

(1) The corona wire should not be twisted or deformed.


Corona wire
Not good
Corona wire
Not good

(2) Clean the corona wire with alcohol after replacement. Never use anything other than alcohol.

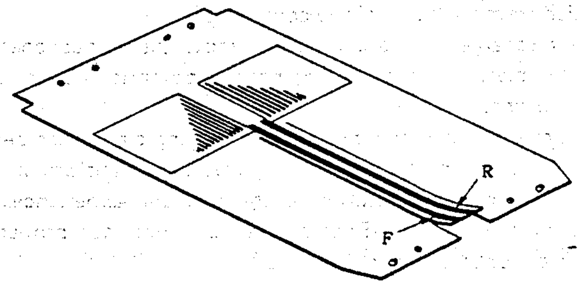
(3) Wipe dry after cleaning.

(4) Use the 70μ corona wire (DWIR-0158CSZZ).

5. Main corona high voltage transformer (MHVG) current adjustment

(1) Tools used

① DCD sheet (UKOGG0087FCZZ)



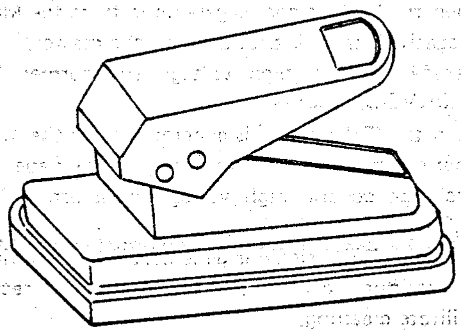
The MHVG measuring tool (UKOGG0087FCZZ) can be used with the SF-750 and SF-755 but the MHVG measuring tool (UKOGG0053FCZZ) used for the SF-750 cannot be used for the SF-755. However, UKOGG0053FCZZ can be modified for the SF-755, if extra holes are added.

(Modification method)

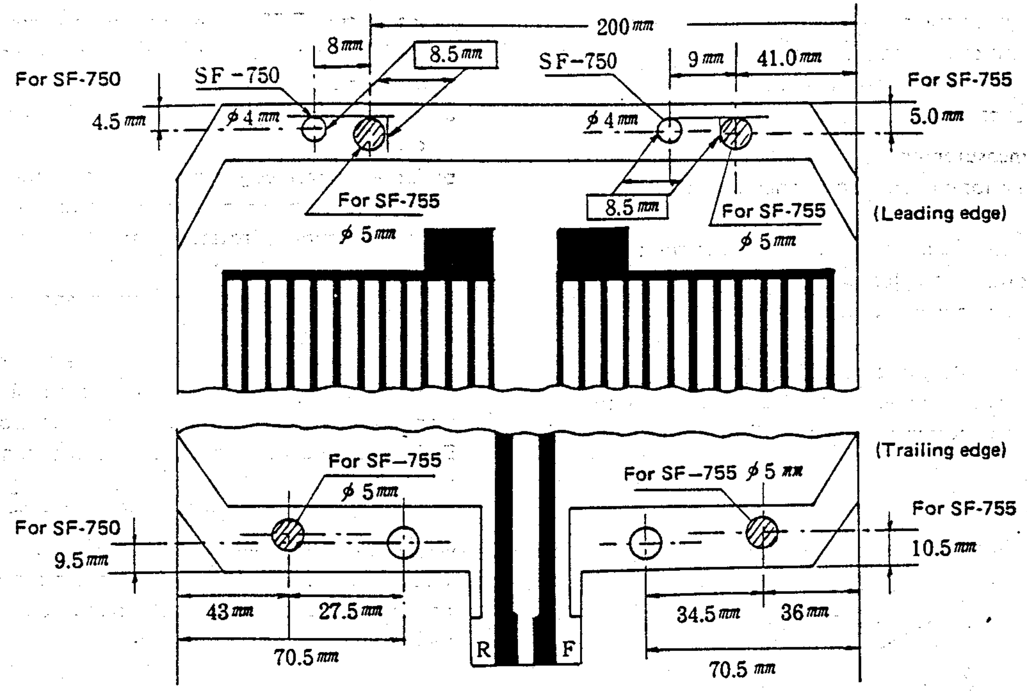
a) Tool required

Single hole puncher (ϕ5mm) (UKOG-0024FCZZ)

(Not avaiable in USA)

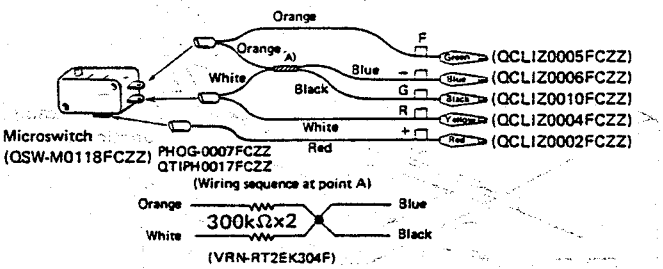


b) Mark the positions for new holes on the DCD sheet (UKOGG0053FCZZ) as shown


200mm
8mm
8.5mm
SF-750
SF-750
9mm
41.0mm
For SF-750
For SF-755
4.5mm
φ4mm
φ4mm
5.0mm
For SF-755
φ5mm
8.5mm
For SF-755
φ5mm
(Leading edge)
(Trailing edge)
For SF-755
φ5mm
For SF-755 φ5mm
For SF-750
9.5mm
For SF-755
10.5mm
43mm
27.5mm
70.5mm
R
F
34.5mm
36mm
70.5mm

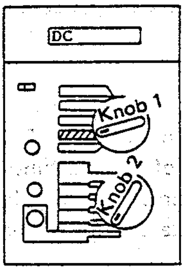
(View from the circuit pattern side)

② DCD shet harness (DHAI-0304FCZZ)


Orange
Orange
A)
White
Blue
Black
White
Red
F
−
G
R
+
Green
Blue
Black
Yellow
Red
(QCLIZ0005FCZZ)
(QCLIZ0006FCZZ)
(QCLIZ0010FCZZ)
(QCLIZ0004FCZZ)
(QCLIZ0002FCZZ)
Microswitch
(QSW-M0118FCZZ)
PHOG-0007FCZZ
QTIPH0017FCZZ
(Wiring sequence at point A)
Orange
White
300kΩx2
Blue
Black
(VRN-RT2EK304F)

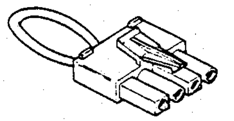
③ Digital ammeter (or multimeter)

NOTE: It must have a measuring range of 0 thru 100μA, with error of ±1%.


DC
Knob 1
Knob 2

Digital multimeter
(UKOGE0019FCZZ) (Not available in USA)

④ 4-p dummy connector (Not required in USA)



(UKOGG0048FCZZ)

(2) When adjustment is required

① After replacement of the main high voltage transformer

② After replacement of the main corona unit

③ After replacement of the main corona wire

④ After removal of the main corona holder

⑤ After removal of the drum

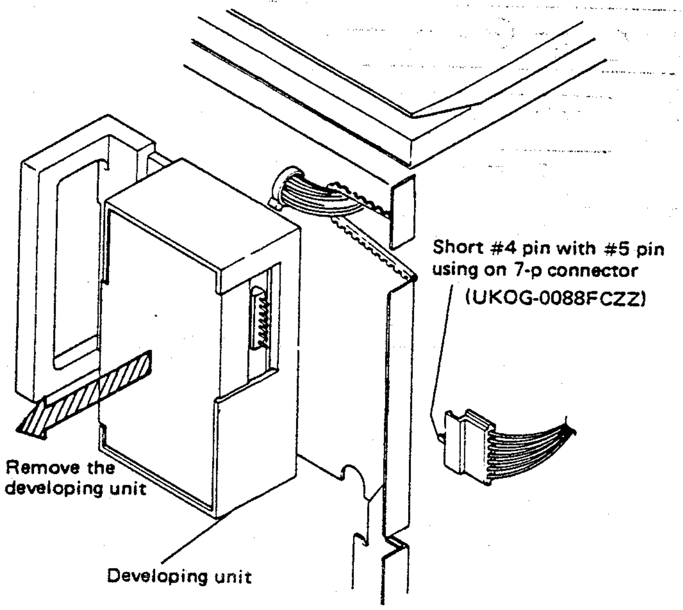
(3) Drum current measurement

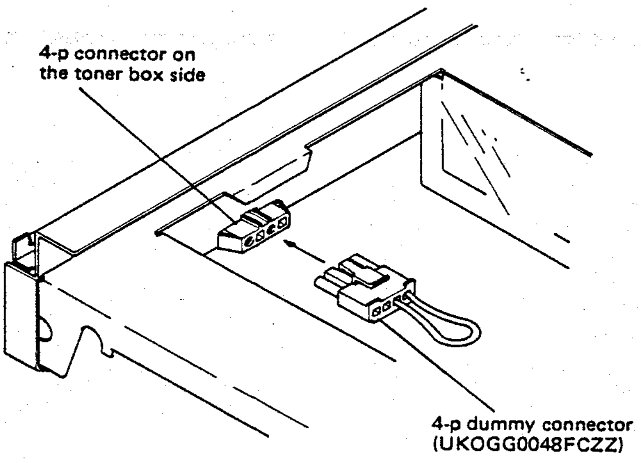
① Remove the developing unit and toner box from the machine.

② Remove the master from the drum, keep it in the dark bag, clean the drum with alcohol.

③ Remove the main corona unit and clean the corona wire.

④ Short #4 pin with #5 pin of the developing unit side 7-p connector, and connect the toner box side 4-p connector with the dummy connector. (This step is not required in USA)


Short #4 pin with #5 pin using on 7-p connector
(UKOG-0088FCZZ)
Remove the developing unit
Developing unit


4-p connector on the toner box side
4-p dummy connector (UKOGG0048FCZZ)

⑤ Install the DCD sheet on the drum.
(DCD sheet installation procedure)
Since the main memory stores the total of the master, counter, the DCD sheet has to be installed in the following manner in order to retain the copy number in the memory.

a) Secure the leading edge of the DCD sheet to the drum.

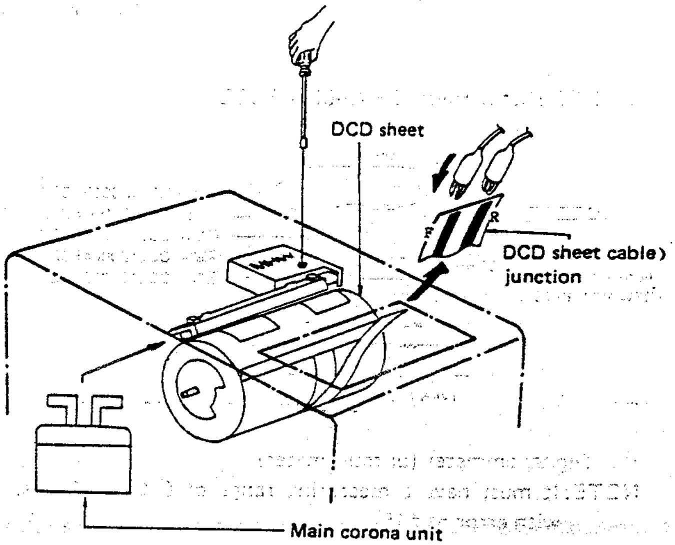
b) Close the trail edge clamp, then turn the drum.
Never turn the drum with the clamp open.
If the drum is rotated with the clamp open, the master counter will be reset.

c) Open the tail edge clamp again and scure the trail edge of the DCD sheet.

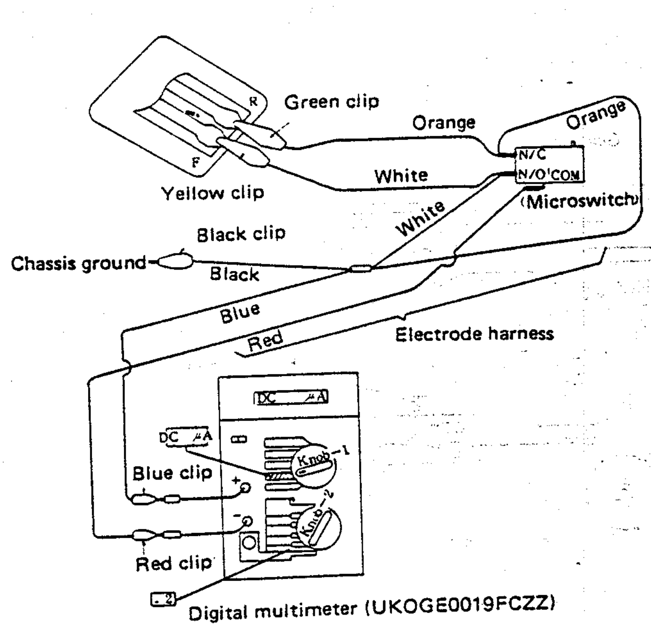
NOTE: Another way of retaining the master counter is to remove MCRSW, PT disk and the 5-p connector.

⑥ Manually turn the drum until the electrodes on the DCD sheet are in from of the main corona unit with the DCD sheet cable over the developing unit access slot. The center of electrodes must be aligned with the center of the main corona unit.

⑦ Install the main corona unit in the machine and connect the DCD sheet with the digital ammeter (multimeter) via the DCD sheet harness.


DCD sheet
DCD sheet cable junction
Main corona unit

CAUTION: Insert an insulator between the DCD sheet and the metal portion of the machine in order to prevent a short circuit of the DCD printed circuit with the metal portion of the machine.


R
F
Green clip
Orange
Orange
N/C
N/O COM
(Microswitch)
White
White
Yellow clip
Black clip
Chassis ground
Black
Blue
Red
Electrode harness
DC µA
DC µA
Blue clip
Knob-1
Knob-2
+
-
Red clip

Digital multimeter (UKOGE0019FCZZ)

IMPORTANT: Ensure that the black clip is connected to chassis ground.

In case UKOGE0019FCZZ is used:

Knob-1: Set to DCmA range.
Knob-2: Set to 0.2.
Red clip: Connect to the (−) jack.
Blue clip: Connect to the (+) jack.

In case the dc ammeter is used:

Red clip: Connect to the (−) jack of the ammeter.
Blue clip: Connect to the (+) jack of the ammeter.

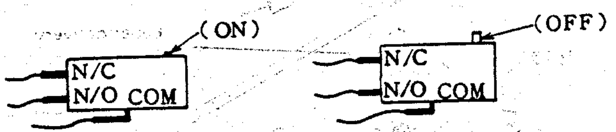
⑧ Adjusting the drum current between the front and rear frame sides

Current difference between sides must be within 1.0µA.

a) Turn on power and key in the test command 09. MHVG is on for 6.4 seconds.

b) Measure drum current on the front frame side and the rear frame side.

- When the microswitch is OFF, the drum current of the front frame side is indicated on the meter.
- When the microswitch is ON, the drum current of the rear frame side is indicated on the meter


(ON)
N/C
N/O COM
(OFF)
N/C
N/O COM

c) Make sure that current different is less than 1µA. If it is more than 1µA, replace the corona unit.

NOTE: There may be a slight fluctuation in the drum current during the measurement. The average value of the meter reading should be used as the measured value.

⑨ Adjusting MHVG output current

a) Turn on power and key in the test command 09. MHVG is on for 6.4 seconds.

b) Remove the air guide and adjust the MHVG for 30.0±0.5µA.

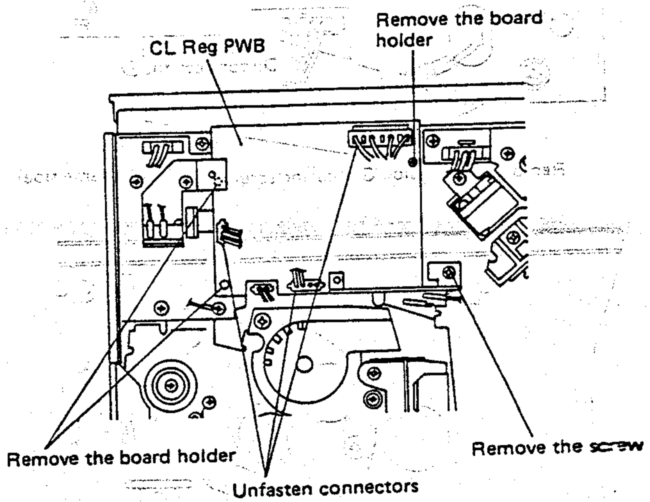
(4) **Procedures after completion of MHVG output current adjustment**

① Turn off power.
② Remove the DCD harness from the DCD sheet.
③ Remove the DCD sheet from the drum.
④ Replace the master.
⑤ Remove the jumper from the 7-p connector.
⑥ Replace the developing unit.
⑦ Remove the dummy connector connected to the toner box 4-p connector.
⑧ Replace the toner box.

NOTE: The THVG and DHVG cannot be adjusted in the field. Do not try to readjust these transformers.

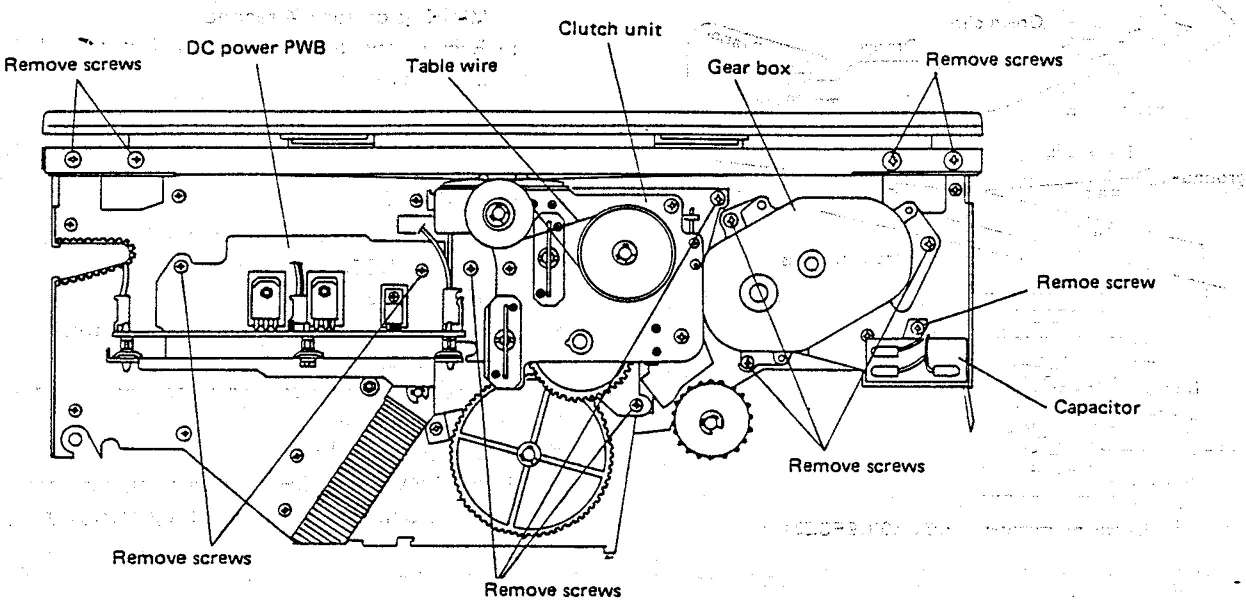
6. How to remove the main high voltage transformer (MHVG)

① Remove AC cord
② Open the front exterior and remove the main corona unit and the operational panel.
③ Open the clam shell.
④ Remove the master and keep it in the dark bag to avoid light exposure.
⑤ Remove the rear side upper exterior.
⑥ Remove the left side upper exterior.
⑦ Remove the CL Reg PWB.

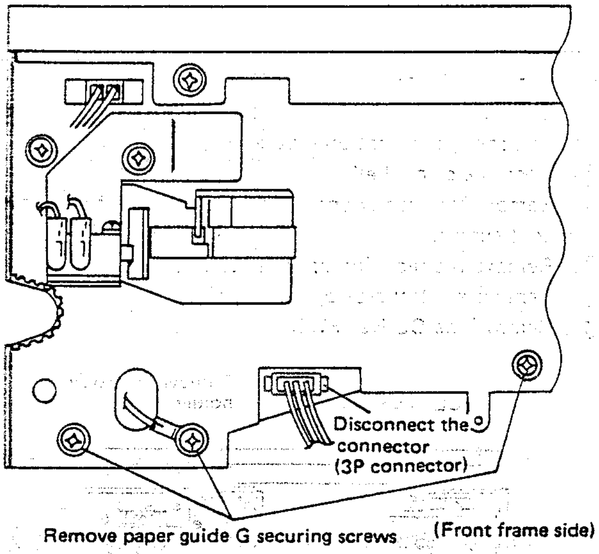

CL Reg PWB
Remove the board holder
Remove the board holder
Remove the screw
Unfasten connectors

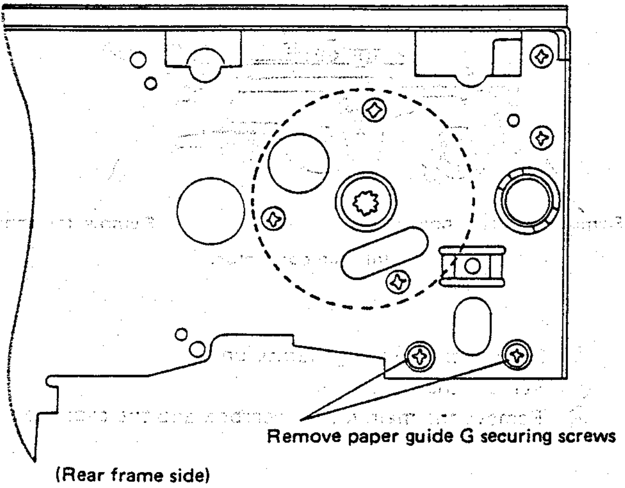
⑧ Remove the discharge lamps unit.
⑨ Remove the table wire.
⑩ Remove the main motor gearbox and the capacitor.

⑪ Remove the power PWB and the clutch unit.

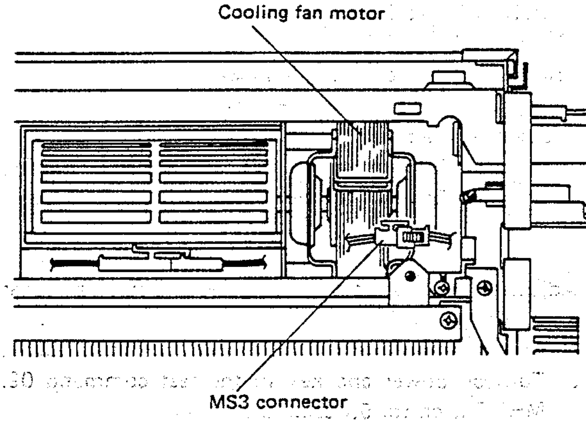

Clutch unit
DC power PWB
Remove screws
Table wire
Gear box
Remove screws
Remoe screw
Capacitor
Remove screws
Remove screws
Remove screws

⑫ Remove the paper guide G unit securing screws and disconnect the MHVG 3-p connector.


Disconnect the connector (3P connector)
Remove paper guide G securing screws
(Front frame side)

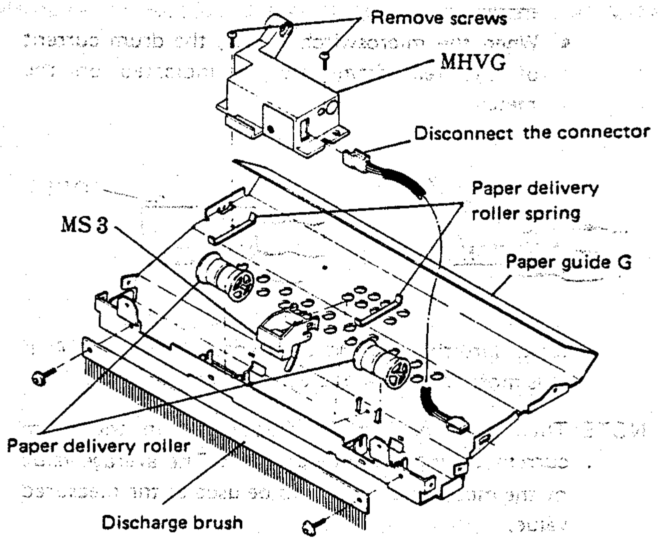

Remove paper guide G securing screws
(Rear frame side)

⑬ Disconnect the MS3 connector.


Cooling fan motor
MS3 connector

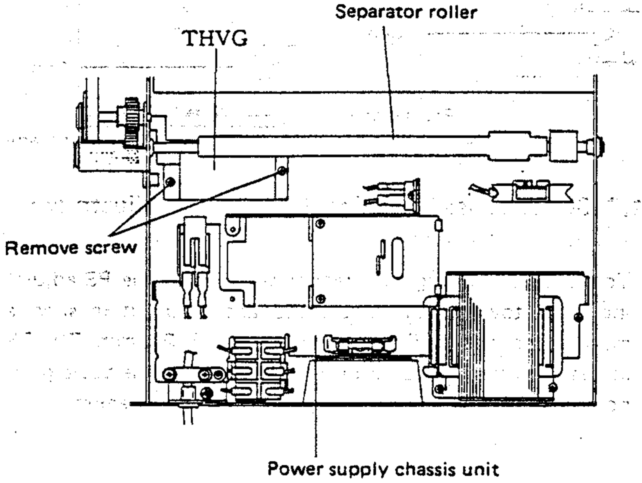
⑭ Remove the paper guide G.

⑮ Remove the main corona transformer (MHVG).


Remove screws
MHVG
Disconnect the connector
Paper delivery roller spring
MS 3
Paper guide G
Paper delivery roller
Discharge brush

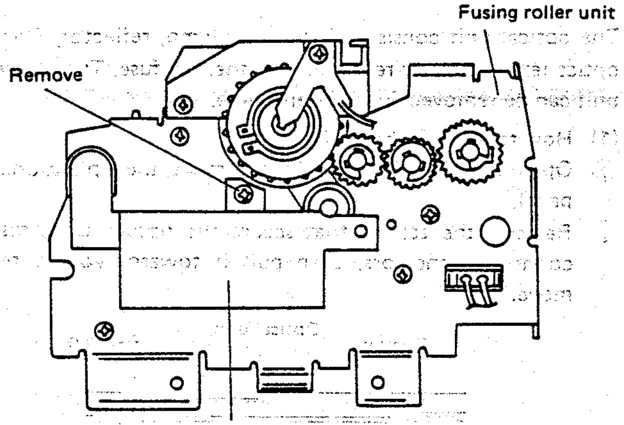
7. How to remove the transfer high voltage transformer (THVG)

① Open the front exterior and the clam shell.
② Remove the lower rear side exterior.
③ Remove the power on/off lever and the left side lower exterior.
④ Remove for screws securing the fusing unit, disconnect the connectors, then remove the fusing unit.
⑤ Remove the transfer corona unit.
⑥ Remove the power supply chassis unit.
⑦ Remove the transfer high voltage transformer (THVG).



8. How to remove the discharge high voltage transformer (DHVG)

① Open the front exterior and the clam shell mechanism.
② Remove the rear side lower exterior.
③ Remove the discharge corona unit.
④ Remove the discharge high voltage transformer (DHVG).



9. Major parts replacement period and caution notes

It is essential to observe the following procedures.

(1) Corona wire:
Replace the corona wire every 16,000 copies. It should be replaced earlier if required to maintain copy quality. The corona wire must be wiped clean with alcohol, then wiped dry with a dry cloth.

(2) When the MHVG is replace
Needs high voltage current adjustment. However, adjustment is not needed after replacement of THVG or DHVG.

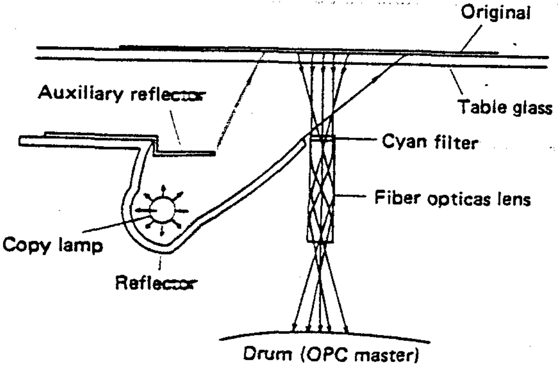
(3) When the main corona wire or main corona unit is replaced.
However, adjustment is not need in the case of the transfer and discharge corona unit.

[8] OPTICAL SYSTEM

1. Outline of the optical system

Because a fiber optics lens is used for the SF-755, light from the copy lamp reaches the drum surface in a short distance. Since the slit width of the fiber optics lens is as 6mm, exposure control is attained by changing the copy-lamp voltage.

The moving table exposure method is used for exposure. Better light efficiency is attained as compared with the lens used for the SF-750 because of a wider lens angle and shorter focus distance which resulted in a shorter distance between the original and master. The copy lamp power consumption is reduced to 300W.



Original
Auxiliary reflector
Table glass
Cyan filter
Fiber opticas lens
Copy lamp
Reflector
Drum (OPC master)

2. Original table

The original must be set in the front right corner of the original table. In the case of library cards, they should be aligned with the specific marked position because it does not involve the void area.

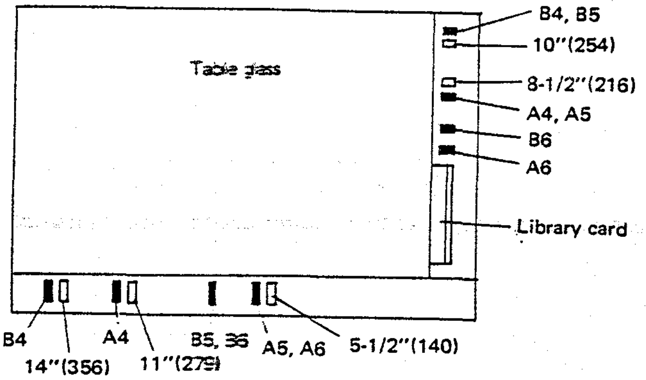


Table glass
B4, B5
10"(254)
8-1/2"(216)
A4, A5
B6
A6
Library card
B4
14"(356)
A4
11"(279)
B5, B6
A5, A6
5-1/2"(140)

3. Void area and image loss

(1) Void area

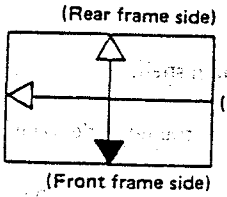
A blank portion appearing on the copy when the copy is taken with the original cover open.

(2) Image loss

The area on which a part of the original is lost.

(3) Void area and image loss tolerance

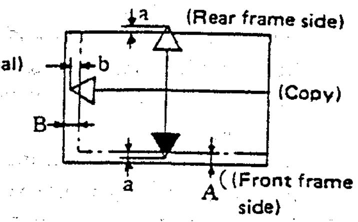
Void area	A	Max 10mm	Min 6mm
	B	Max 4mm	Min 1mm
Image loss	a	Max 12mm	Min 6mm
	b	Max 2.5mm	



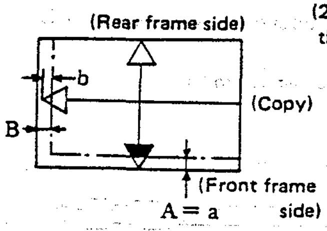
(Rear frame side)
(Original)
(Front frame side)

(Without center deviation and off center)

(2mm of center deviation towards the rear frame side)

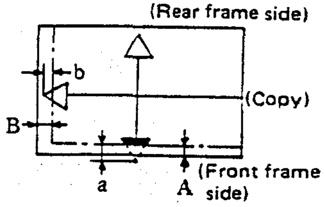


a
(Rear frame side)
b
(Copy)
B
a
A
((Front frame side)



(Rear frame side)
b
(Copy)
B
(Front frame side)
A = a

(2mm of center deviation towards the front frame



(Rear frame side)
b
(Copy)
B
a
A
(Front frame side)

4. MS6 (copy leading edge registration) adjustment

Tolerance of leading edge registration. Move the PS adjusting plate towards the arrowhead and adjust it in such a manner that the leading edge registration is 0±1mm. The PS adjusting plate is located on a middle part of the table glass holding plate under the original cover holding bracket.

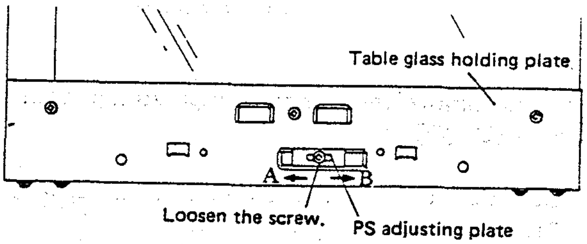


Table glass holding plate
A
B
Loosen the screw.
PS adjusting plate

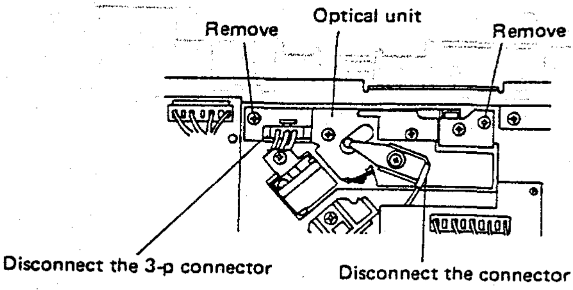
5. Optical unit

The optical unit consists of the copy lamp, reflector, fiber optics lens, auxiliary reflector, and thermal fuse. The whole unit can be removed from the machine.

(1) **How to remove the optical unit**

① Open the front exterior and remove the operational panel.

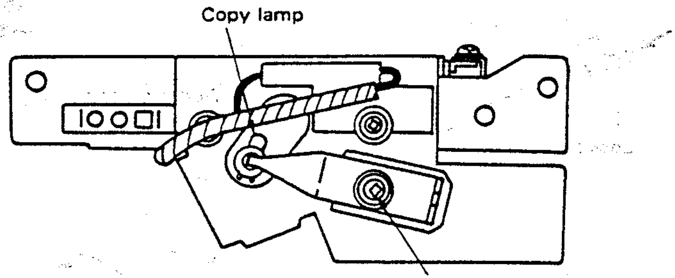
② Remove the screws that secure the optical unit, disconnect connectors, then pull it towards you to remove.



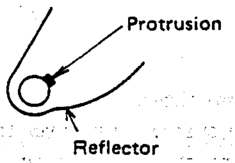
Remove
Optical unit
Remove
Disconnect the 3-p connector
Disconnect the connector

(2) How to remove the copy lamp thermal fuse

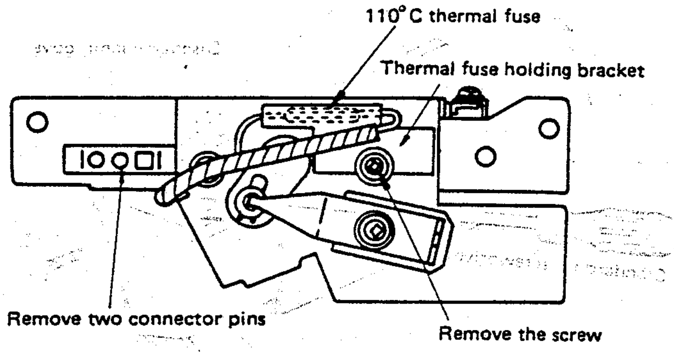
① To remove the copy lamp, remove the screw that holds the electrode, remove the electrode, then remove the copy lamp.



Remove this screw to remove the electrode.
Replace the copy lamp so that the protrusion on the copy lamp should be towards the outside of the reflector

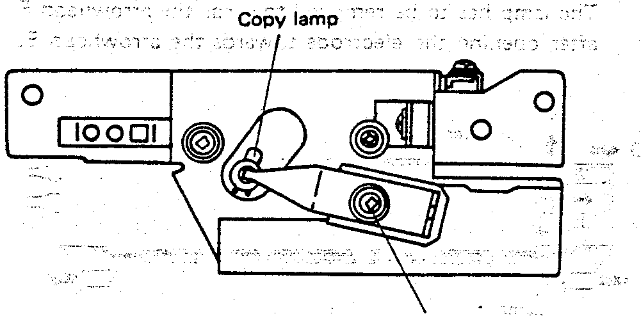

Protrusion
Reflector

② To remove the thermal fuse, remove the thermal fuse holding bracket, disconnect the 3-P connector, then remove the termal fuse.
The thermal fuse must be replaced as an assembly (CFS-T0062FC31).


110°C thermal fuse
Thermal fuse holding bracket
Remove two connector pins
Remove the screw

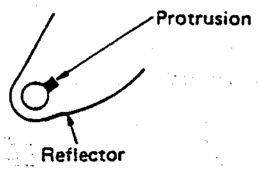
(2)' How to remove the copy lamp thermal fuse (For (U.S. and Canadian models only)

① Before removing the copy lamp, remove the electrode securing screw and the electrode.

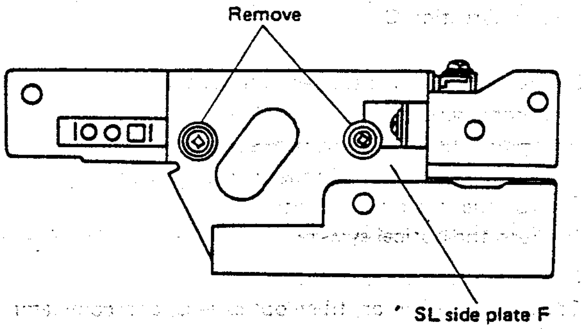


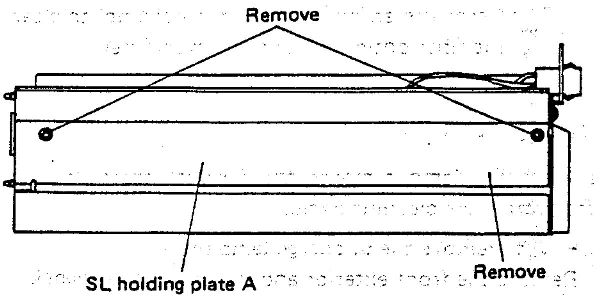
Remove this screw then remove the electrode.

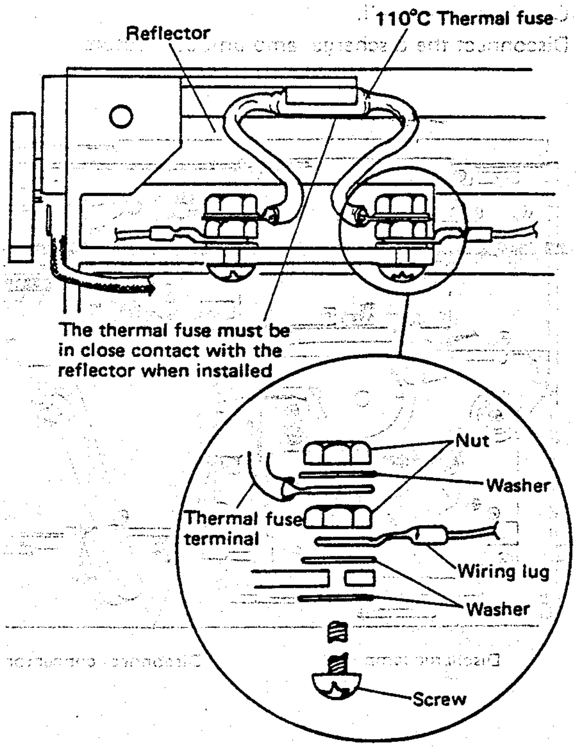
The protrusion on the copy lamp should situated as shown.


Protrusion
Reflector

② Before replacement of the thermal fuse, remove the SL side plate F and the SL holding plate A.


Remove
SL side plate F

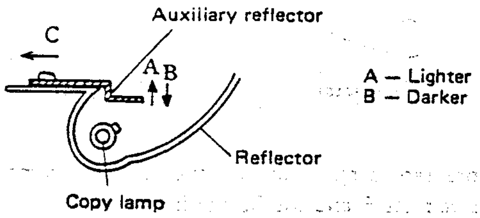

Remove
SL holding plate A
Remove


110°C Thermal fuse
Reflector
Nut
Washer
Thermal fuse terminal
Wiring lug
Washer
Screw

The thermal fuse must be in close contact with the reflector when installed

(3) Adjustment of the auxiliary reflector

When there is density variation between the front and rear frame sides, move the auxiliary reflector to adjust for even density.


Auxiliary reflector
C
A
B
A — Lighter
B — Darker
Reflector
Copy lamp

NOTE: The auxiliary reflector has been installed all the way in direction C.

Before the adjustment, check the following.

- Corona wire
- MHVU output current between both frame sides
- Gap between the MG roller and the doctor
- MG roller main pole position
- Clean the optical system

(4) Cleaning of the optical system

Copy lamp, reflector, fiber optics lens, and copy lamp thermal fuse must be removed from the machine before replacement or cleaning.

CAUTION: Never use anything other than alcohol to clean the fiber optics lens and the cyan filter.

6. Discharge lamp unit

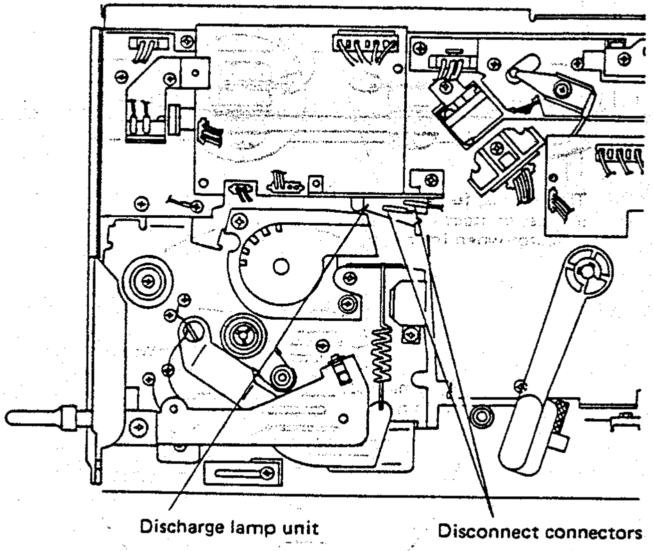
The discharge lamp removes the residual charge on the master during the cleaning cycle.

(1) How to remove the discharge lamp unit

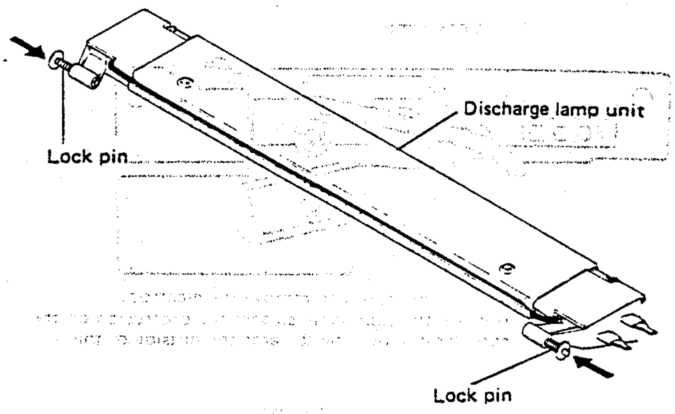
① Remove the front exterior and the operational panel.

② Open the clam shell.

③ Disconnect the discharge lamp unit connectors.

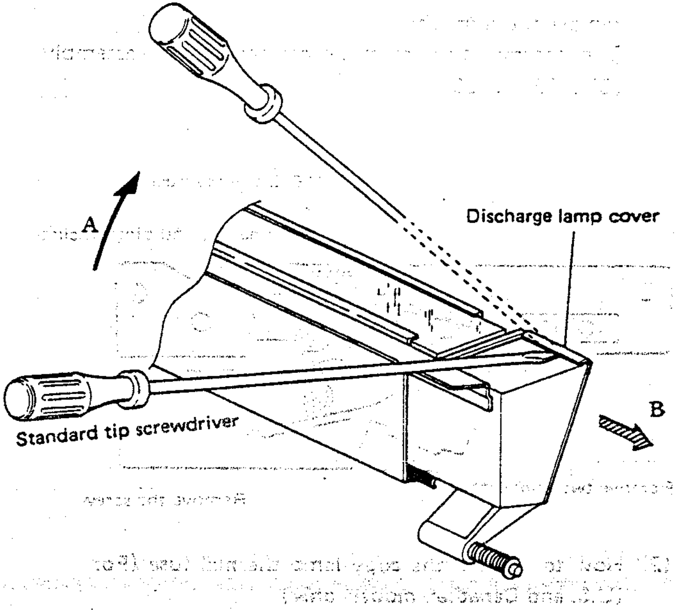

Discharge lamp unit
Disconnect connectors

④ Push the lock pin towards the arrowhead and remove the discharge lamp unit from the machine.


Discharge lamp unit
Lock pin
Lock pin

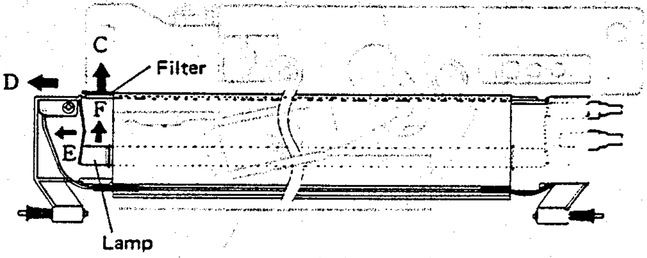
(2) How to remove the filter

① Pry open the discharge lamp cover towards the arrow direction A using the standard tip screwdriver then slide the cover towards the direction B.


A
Discharge lamp cover
Standard tip screwdriver
B

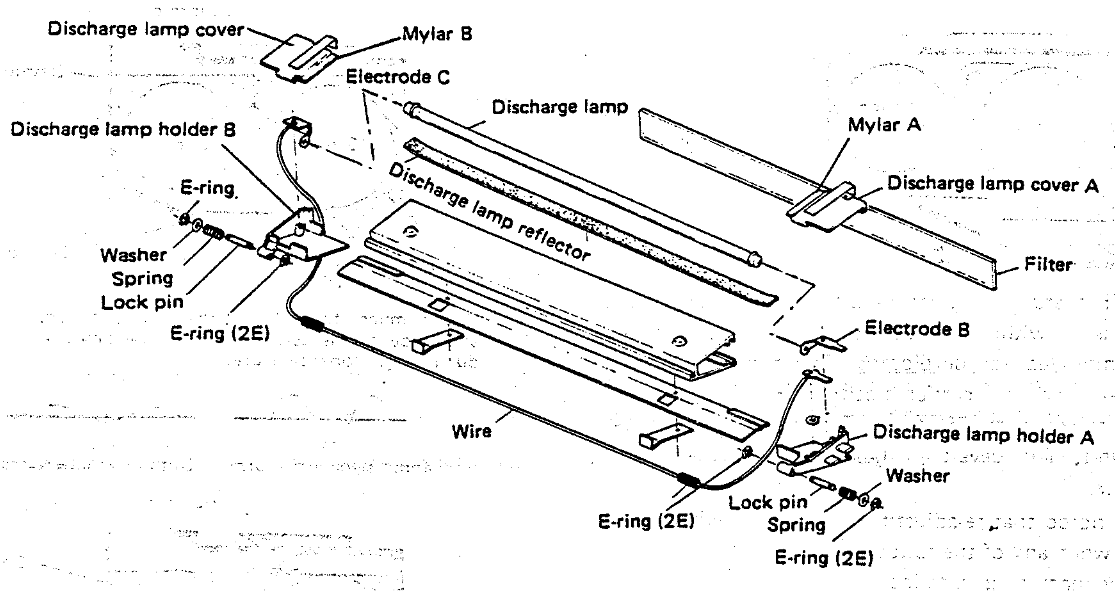
② Slightly lift up the filter towards the direction C and pull it out towards the direction D.

The lamp has to be removed towards the arrowhead F after opening the electrode towards the arrowhead E.


C
D
Filter
F
E
Lamp

(3) Disassembly of the discharge lamp unit

The discharge lamp unit should be disassembled in the following manner.


Discharge lamp cover
Mylar B
Electrode C
Discharge lamp
Discharge lamp holder B
Mylar A
Discharge lamp cover A
E-ring
Discharge lamp reflector
Washer
Spring
Lock pin
Filter
E-ring (2E)
Electrode B
Wire
Discharge lamp holder A
Washer
Lock pin
E-ring (2E)
Spring
E-ring (2E)

(4) Copy lamp regulator PWB adjustment

The copy lamp regulator PWB should be adjusted when one of the following conditions is met.

① After replacement of the copy lamp.

② After replacement of the copy lamp regulator PWB.

③ After replacement of the exposure control VR.

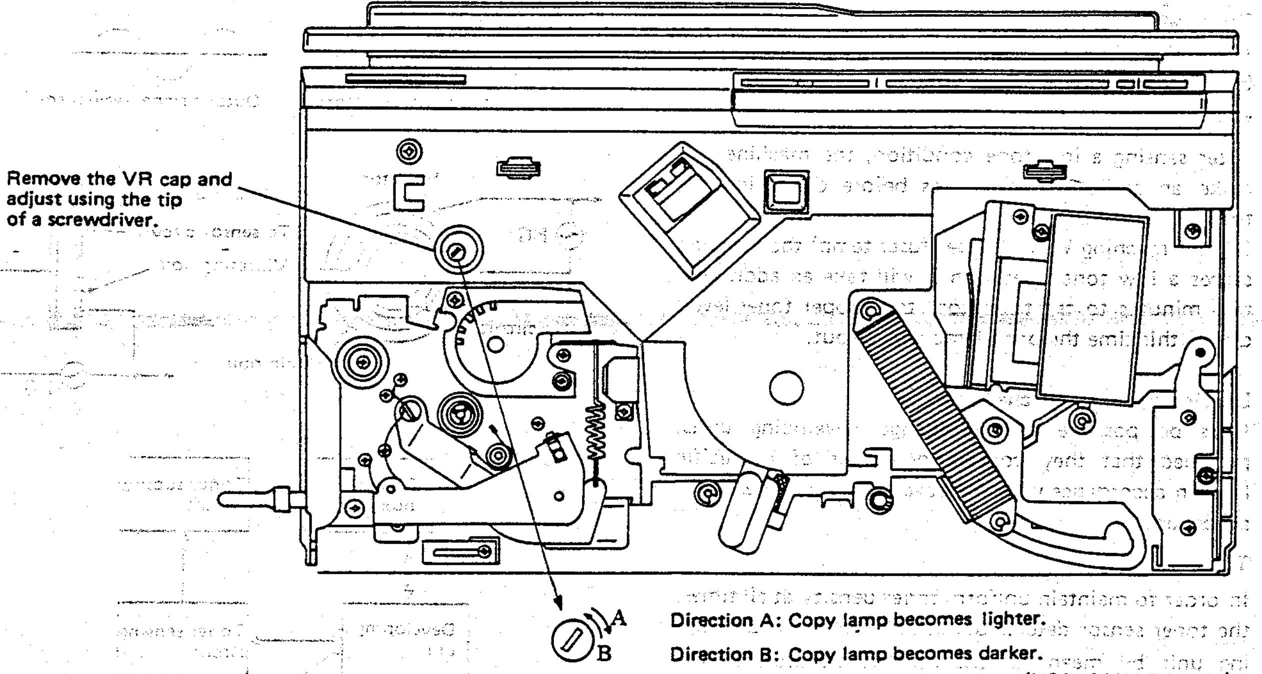
(5) Adjusting method

① Open the front exterior.

② Actuate the doorswitch (DSW), then turn on power.

③ Remove the cap of the adjusting VR that located on the operational panel.

④ Adjust the VR so that the 0.1 scale of the gray scale is copied with a slight background using test chart (UKOG-0089CSZZ) on an exposure setting of 1.75.

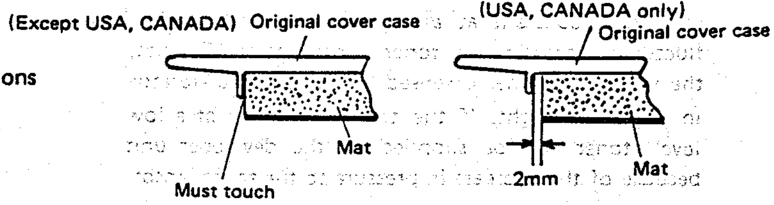

Remove the VR cap and adjust using the tip of a screwdriver.
A
B

Direction A: Copy lamp becomes lighter.

Direction B: Copy lamp becomes darker.

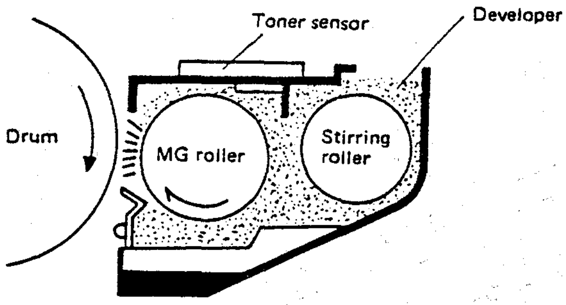
(5) Location of the original covert mat

The original cover mat is located in different positions depending upon the export model.


(Except USA, CANADA) Original cover case
Mat
Must touch
(USA, CANADA only)
Original cover case
2mm
Mat

[9] DEVELOPING SECTION (Developing unit, toner box)

1. Outline of the developing unit


Toner sensor
Developer
Drum
MG roller
Stirring roller

The SF-755 features a toner density contral mechanism (Toner Sensor) within the developing unit. A magnetic brush is employed for developing. The toner is charged negative (–) and the carrier positive (+). 740g of the developer, mixed with 7% toner, is contained in the developing unit. The developer has to be replaced every 8,000 copies.

It must be noted that re-adjustment of the developer level is required when any of the following occurs:

1) When the machine is installed.
2) When the developer is replaced.
3) When the toner sensor is replaced.

(1) Toner supply response

Multicopy of A4 or letter size original with 50% toned area can be attained.

(2) Toner box capacity

About 320g

(3) Toner consumption

About 8,000 copies of A4 or letter size originals with 6% toned area are possible.

(4) Toner lamp (TEL)

① After sensing a low tone condition, the machine will make an additional 30 copies before displaying the toner lamp (TEL).

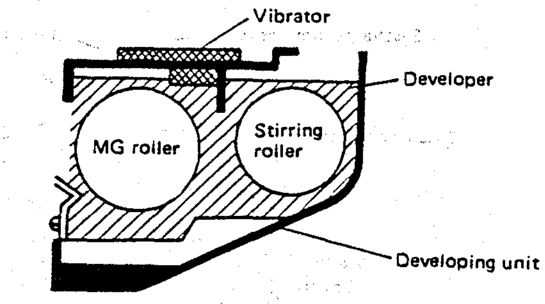
② If after reaching WTL (Proper fuser temp) the machine senses a low tone condition it will take an additional two minutes to try to restore the proper toner level, during this time the print lamp will be out.

(5) Developing unit interchange

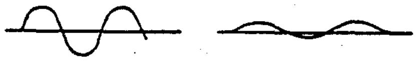
It is be possible to interchange developing units, provided that they contain developer of a specific level in accordance with the developer level adjustment procedure.

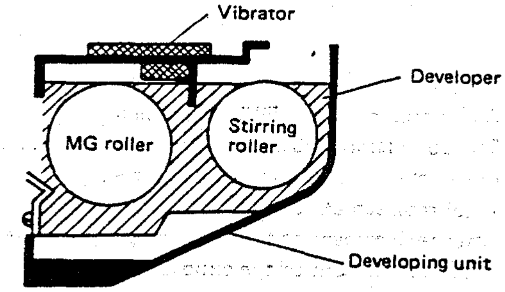
(6) Toner sensor

In order to maintain uniform toner density at all times, the toner sensor detects developer level in the developing unit by means of the ceramic vibrator. Carrier volume is constant at all times, but toner volume fluctuates according to toner consumption. So that, the volume of toner is sensed by the ceramic vibrator in terms of height. If the toner volume is at a low level, toner will be supplied to the developer unit because of the decrease in pressure to the toner sensor. Magnitude of the amplitude is sensed by the sensing pole and sent to the sensing circuit.

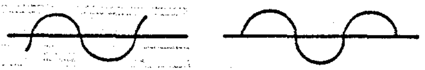

Vibrator
Developer
MG roller
Stirring roller
Developing unit

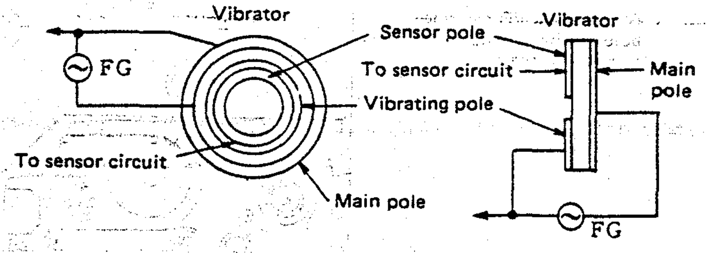
If too much toner is in the developer unit, amplitude of the ceramic vibrator becomes less due to larger toner pressure.

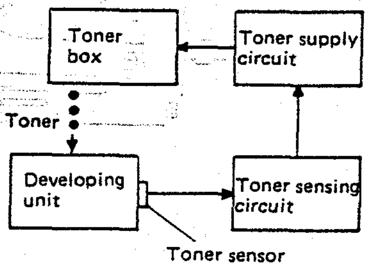



Vibrator
Developer
MG roller
Stirring roller
Developing unit

If less toner is in the developer unit, amplitude of the ceramic vibrator becomes larger due to less toner pressure.




Vibrator
FG
To sensor circuit
Sensor pole
To sensor circuit
Vibrating pole
Main pole
Vibrator
Main pole
FG


Toner box
Toner supply circuit
Toner
Developing unit
Toner sensing circuit
Toner sensor

(8) Developing bias

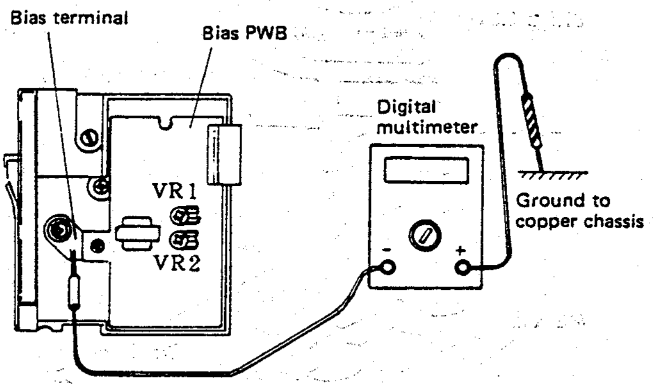
Bias potential of −198±4VDC is added to the MG roller from the Bias PWB during the developing process. On the other hand, the bias potential of −150VDC is added during the cleaning process. The Bias PWB is located on the developer unit.

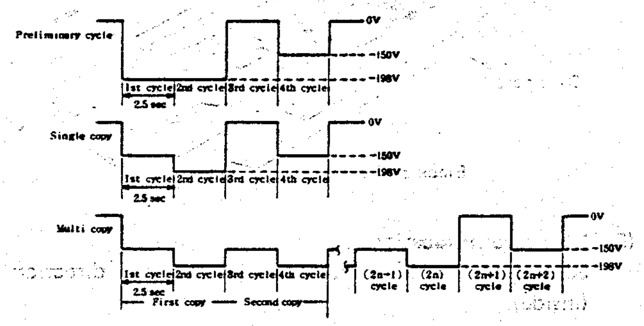
(9) Bias voltage adjustment

Key in test command 08, bias output of −150VDC and −198VDC will be generated. Adjust VR1 and VR2 while observing these voltages on the digital multimeter (UKOGE0019FCZZ).

First, adjust VR2 to obtain −150±1.5V, then adjust VR1 to obtain −198±2V.

CAUTION: Never perform a reverse sequence of the operation.

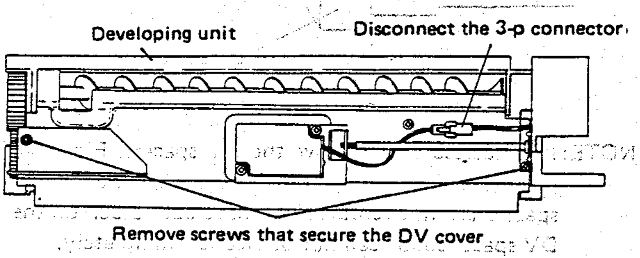

Bias terminal
Bias PWB
Digital multimeter
Ground to copper chassis
VR1
VR2
-
+



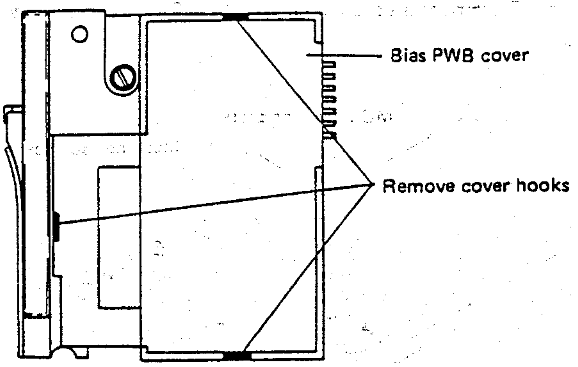
2. Major parts disassembly and assembly

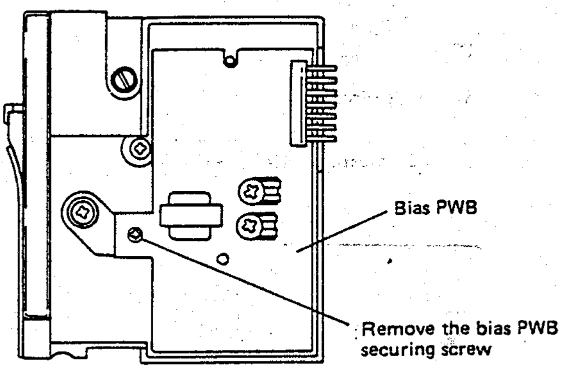
(1) Disassembly of the developing unit

① Disconnect the 3-p connector connected with the toner sensor and remove the DV cover of the developing unit.


Developing unit
Disconnect the 3-p connector
Remove screws that secure the DV cover

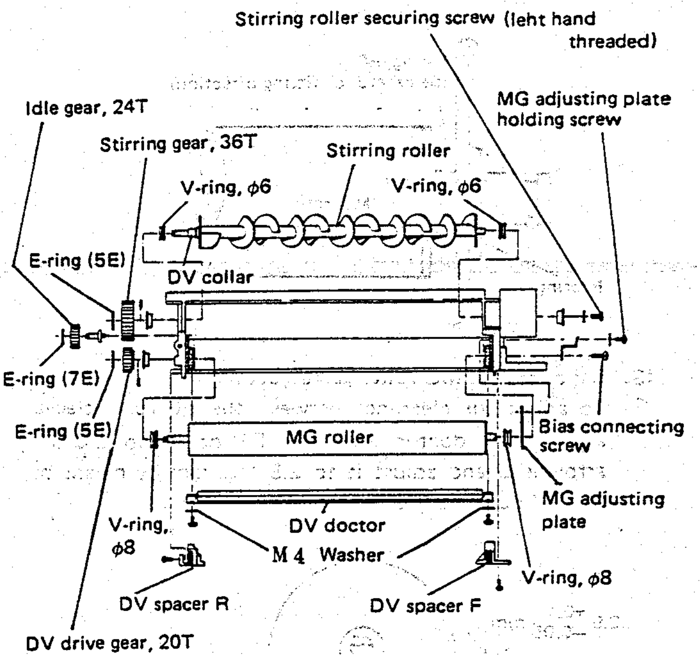
② Remove the bias PWB cover on the front frame side and remove the Bias PWB.


Bias PWB cover
Remove cover hooks


Bias PWB
Remove the bias PWB securing screw

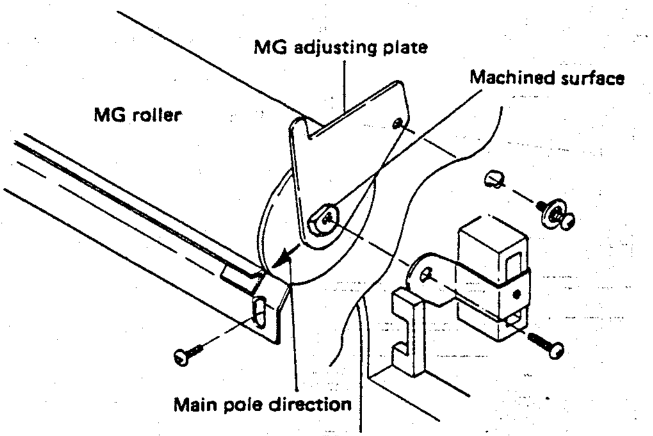
③ Disassemble the developing unit as illustrated below.

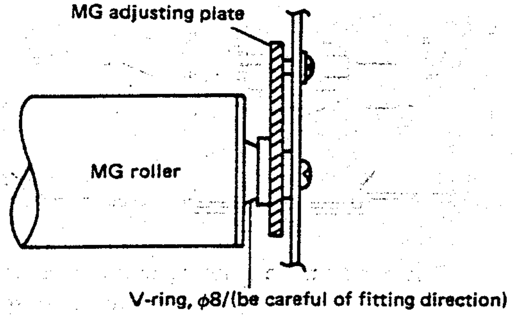
NOTE: Pay attention to the stirring roller securing screw, it is left hand threaded.


Stirring roller securing screw (leht hand threaded)
Idle gear, 24T
MG adjusting plate holding screw
Stirring gear, 36T
Stirring roller
V-ring, φ6
V-ring, φ6
E-ring (5E)
DV collar
E-ring (7E)
E-ring (5E)
MG roller
Bias connecting screw
MG adjusting plate
V-ring, φ8
DV doctor
M 4 Washer
V-ring, φ8
DV spacer R
DV spacer F
DV drive gear, 20T

(2) MG roller location (Front frame side)

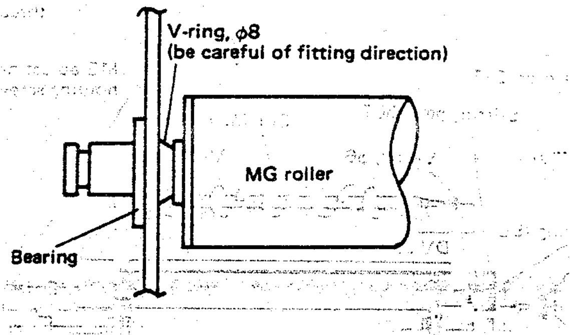
① The main pole of the MG roller must be on the doctor side. The machined surface of the MG roller must face up.


MG adjusting plate
Machined surface
MG roller
Main pole direction


MG adjusting plate
MG roller
V-ring, $\phi8$/(be careful of fitting direction)

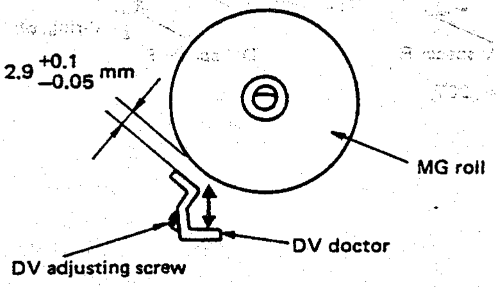
(Rear frame side)

② Fix the MG roller so that there is no clearance between the $\phi8$ V-ring and the MG roller sleeve.


V-ring, $\phi8$
(be careful of fitting direction)
MG roller
Bearing

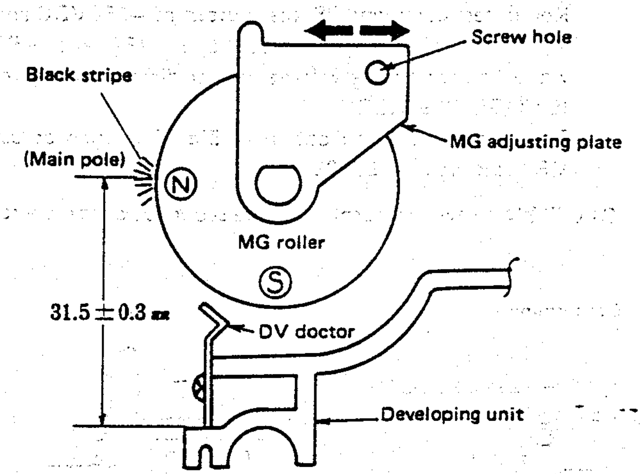
(3) DV doctor to MG roller gap adjustment

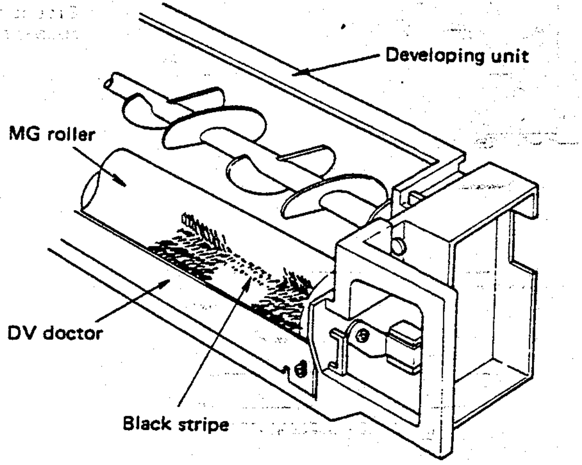
① To adjust the clearance between the MG roller sleeve and the DV doctor, move the DV doctor foward the arrowhead and adjust it to $2.9^{+0.1}_{-0.05}$ mm by means of the DV doctor adjusting screw.


$2.9^{+0.1}_{-0.05}$ mm
MG roll
DV doctor
DV adjusting screw

(4) Main pole position adjustment

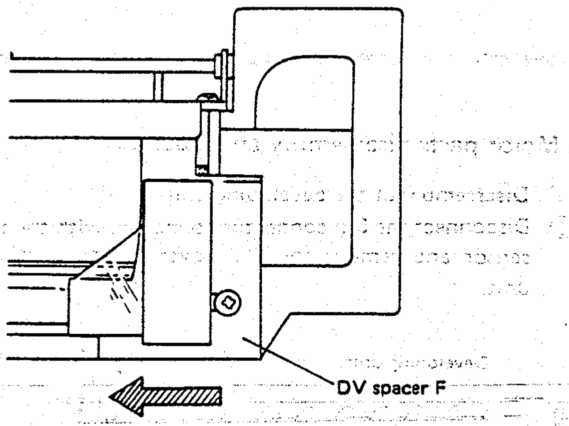
Fill the developing unit with developer, with your fingertip make a swipe across the MG roller surface about 10mm wide. Move the MG adjusting screw in either arrow direction to adjust the center of the black stripe to 31.5±0.3mm from the base of the DV doctor to the center of the black stripe.


Screw hole
Black stripe
(Main pole)
MG adjusting plate
N
MG roller
S
31.5 ± 0.3 mm
DV doctor
Developing unit


Developing unit
MG roller
DV doctor
Black stripe

(5) DV spacer F location

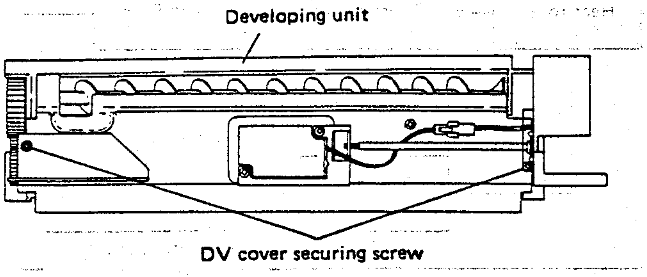
Set the DV spacer all the way in the arrow direction (inside).



NOTE: It is necessary to remove the DV spacers, F and R, from the developing unit before cleaning. If the spacers are not removed the developer stuck on the DV spacer suede can not be cleaned completely.

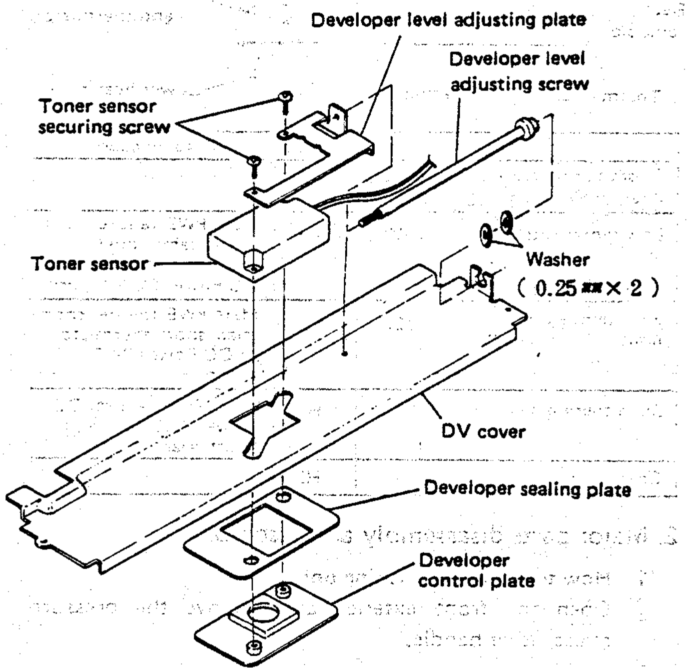
(6) Toner sensor location

① The toner sensor must be fixed firmly to the DV cover of the developing unit. Improper fixing of the toner sensor may impede the proper action of toner control.

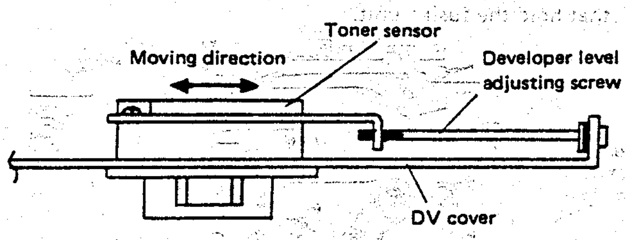

Developing unit
DV cover securing screw

② Cautions when installing the toner sensor to the DV cover.

a) Secure the toner sensor on the DV cover so that there is no vertical play between the toner sensor and the DV cover.


Developer level adjusting plate
Developer level adjusting screw
Toner sensor securing screw
Toner sensor
Washer
(0.25 mm × 2)
DV cover
Developer sealing plate
Developer control plate

b) Ensure that the toner sensor moves smoothly against the DV cover when the developer level adjusting screw is turned.


Toner sensor
Moving direction
Developer level adjusting screw
DV cover

(7) Toner sensor position adjustment

Position of the toner sensor must be adjusted in accordance with the procedure mentioned in [3]-4, Developer level adjustment.

Position of the toner sensor must be adjusted after any of the following.

- Replacement of the toner sensor
- When the MG roller main pole position is changed
- When the clearance between the DV doctor and the MG roller is changed.

CAUTION: The following adjustments are needed before adjusting the toner sensor position.

- Clearance adjustment between the MG roller and the DV doctor
- MG roller main pole adjustment

Making adjustments after the toner sensor position adjustment may cause undertoning or overtoning.

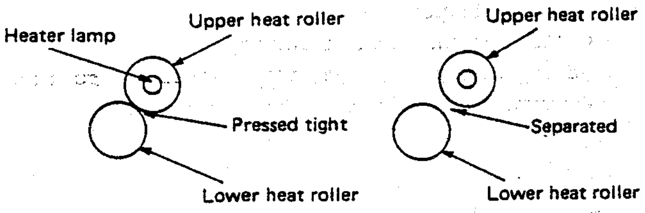
[10] FUSING UNIT

1. Outline of the fusing unit

Basically, the mechanism of the SF-755 fusing unit is similar to that of the SF-750, but the fusing unit of the SF-755 is in a form of assembly unit. Therefore, it can easily be removed from the machine.

(1) Heat roller pressure release mechanism

The load on the heat roller is removed during power-off by releasing the pressure between the upper heat roller and the lower heat roller.

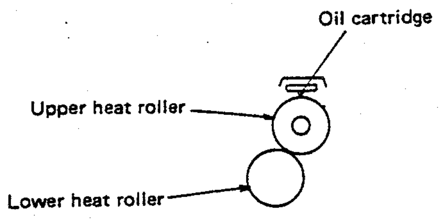

Heater lamp
Upper heat roller
Pressed tight
Lower heat roller
Upper heat roller
Separated
Lower heat roller

Pressure release lever is up during power-on.

Pressure release lever is down during power-off.

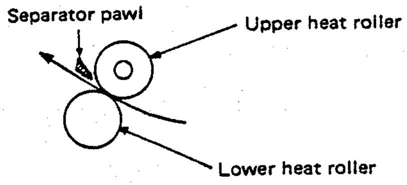
(2) Heat roller and silicone oil cartridge

A teflon roller is used for the upper heat roller and a silicon roller is used for the lower heat roller. Silicone oil is supplied to the heat rollers from the silicone oil cartridge for better paper separation.


Oil cartridge
Upper heat roller
Lower heat roller

(3) Separator pawl

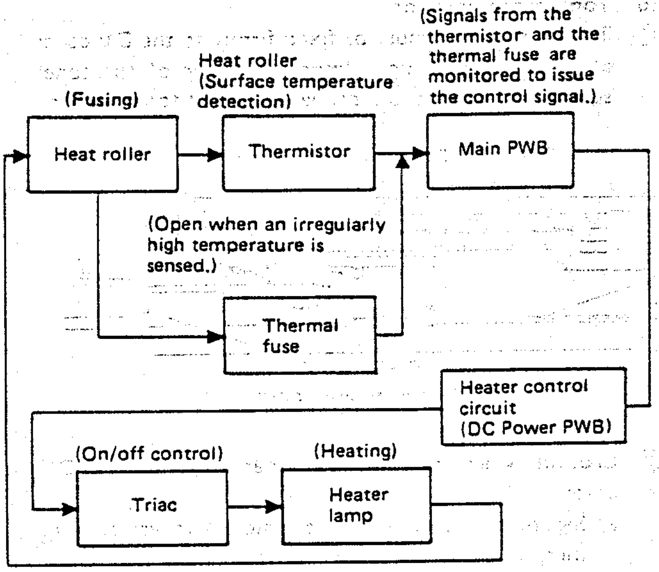
Two separator pawls acting on the upper heat roller are installed on the fusing roller cover.

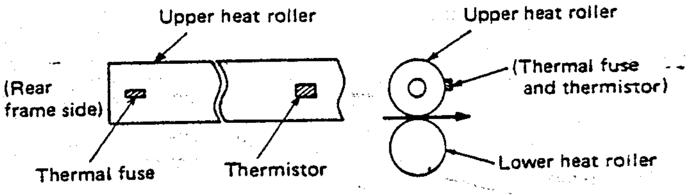

Separator pawl
Upper heat roller
Lower heat roller

(4) Heater control

Heater temperature is controlled by the DC Power Supply PWB, thermistor, and Main PWB. A thermal fuse along with the self-diagnostic function acts to shut down the heater power if an irregular temperature occurs in the heater section.

Low temperature limit is set to 180°C and high temperature limit to 220°C.


(Fusing)
Heat roller (Surface temperature detection)
(Signals from the thermistor and the thermal fuse are monitored to issue the control signal.)
Heat roller
Thermistor
Main PWB
(Open when an irregularly high temperature is sensed.)
Thermal fuse
Heater control circuit (DC Power PWB)
(On/off control)
(Heating)
Triac
Heater lamp


Upper heat roller
(Rear frame side)
Thermal fuse
Thermistor
Upper heat roller
(Thermal fuse and thermistor)
Lower heat roller

	Temp	Status	Trouble cause
Preset temperature (Power down state...130°C)	180°		
Low temperature limit	160°C	H4	Main PWB failure, open heater lamp, open triac, open thermistor, DC Power PWB failure
High temperature limit	220°C	H3	Main PWB failure, short triac, short thermistor, or DC Power PWB failure
Open thermal fuse		H1	Main PWB failure, DC Power PWB failure, or short triac
Open thermistor		H2	

2. Major parts disassembly and assembly

(1) How to remove the fusing unit

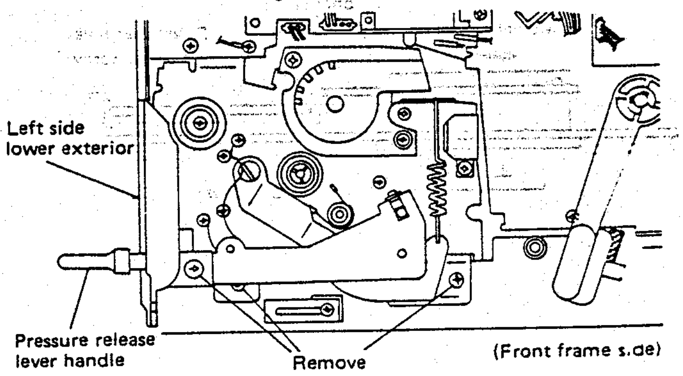
① Open the front exterior and remove the pressure release lever handle.

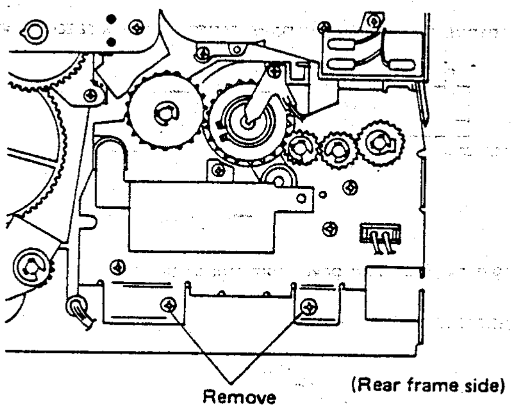
② Remove the lower rear cover.

③ Open the clam shell mechanism and remove the left side lower exterior.

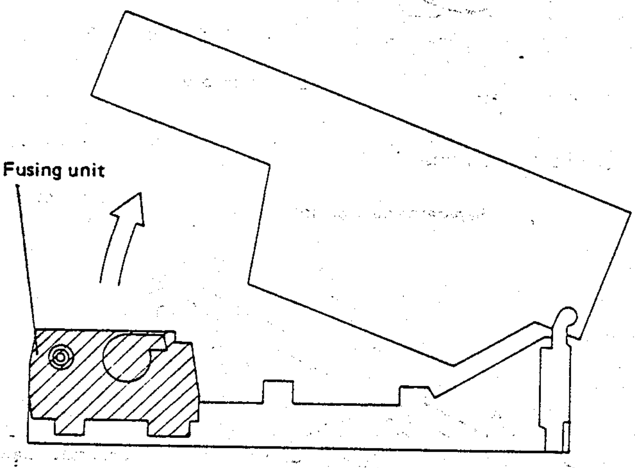
④ Disconnect connectors that connected with the fusing unit.

⑤ Remove four screws on the front and rear frame sides that hold the fusing unit.


Left side lower exterior
Pressure release lever handle
Remove
(Front frame side)

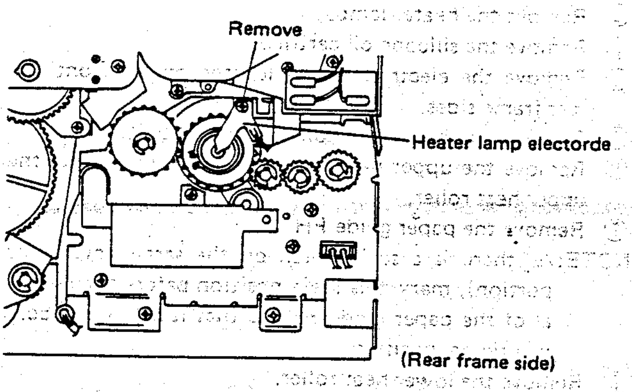

Remove
(Rear frame side)

⑥ Lift and remove the fusing unit in the arrow direction.


Fusing unit

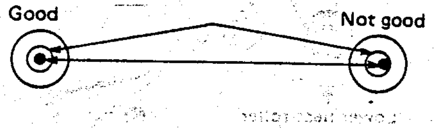
(2) Heater lamp

Remove the heater lamp electrode on the rear frame side, then remove the heater lamp.


Remove
Heater lamp electorde
(Rear frame side)

(Caution during replacement of the heater lamp)

The heater lamp must positioned at the center of the hollow heat roller inner surface.

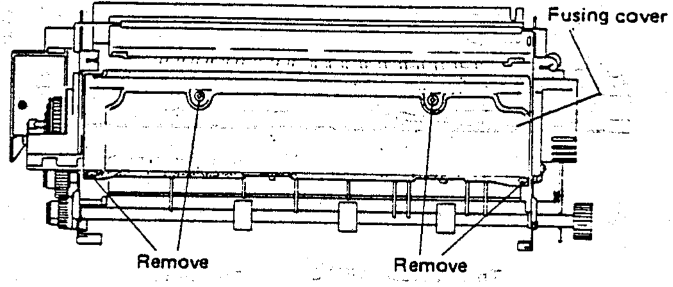

Good
Not good

(3) Roller cleaner, thermistor, thermal fuse

① Remove the heater lamp.

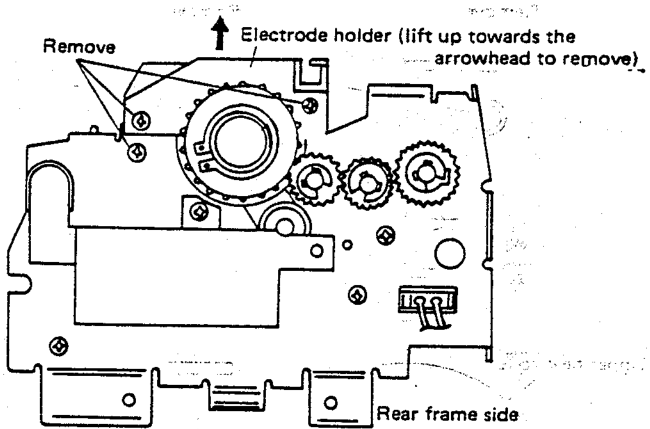
② Engage the separator pawl on the pawl stopper.

③ Remove the fusing cover.

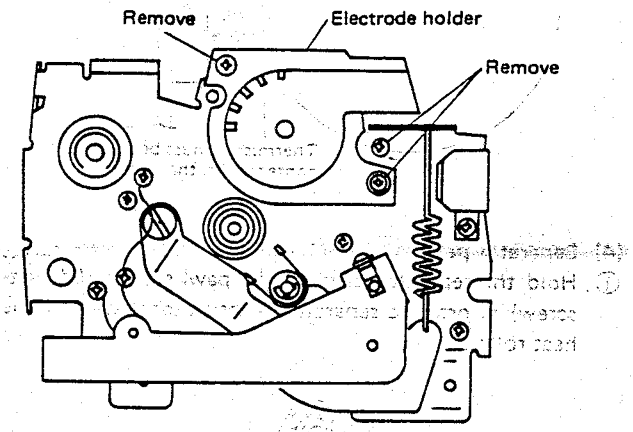

Fusing cover
Remove
Remove

(Hold the separator pawl on the pawl stopper before removing the fusing cover.)

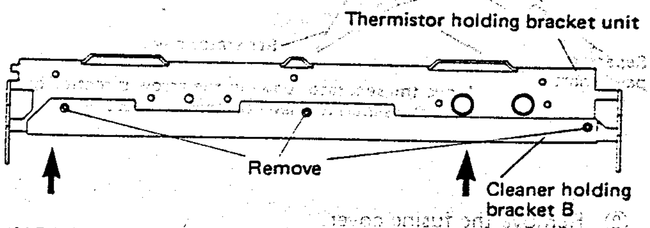
④ Remove the electrode holder and the thermistor supporting bracket unit.


Remove
Electrode holder (lift up towards the arrowhead to remove)
Rear frame side

Remove the rear thermistor supporting unit after removal of the electrode holder.

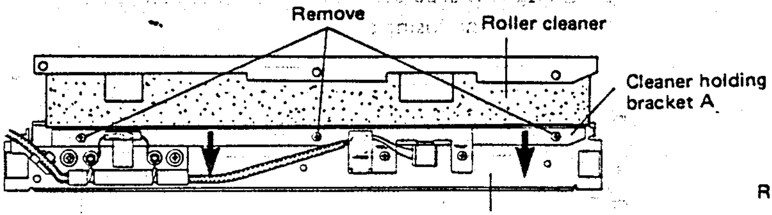

Remove
Electrode holder
Remove
(Front frame side)

⑤ Remove the roller cleaner from the thermistor supporting bracket unit.

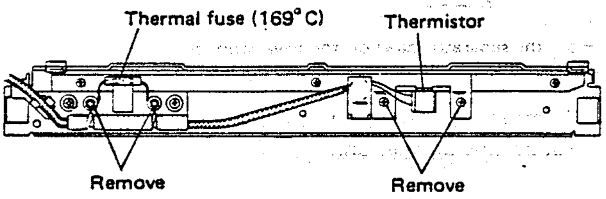

Thermistor holding bracket unit
Remove
Cleaner holding bracket B

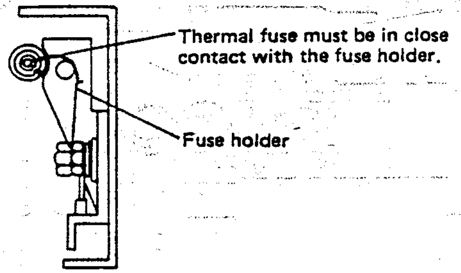
NOTE: Move the cleaner holding bracket B all the way is the arrow direction to install.

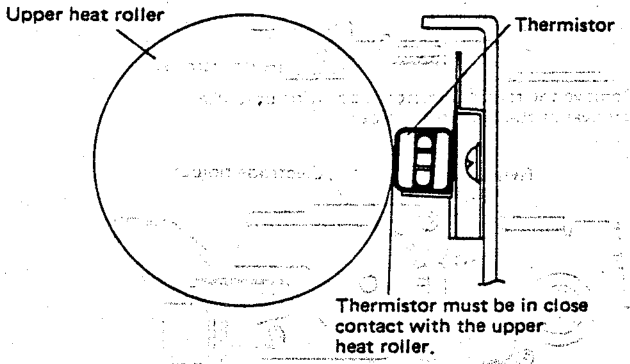
NOTE: Move the cleaner holding bracket A all the way in the arrow direction to install.


Remove
Roller cleaner
Cleaner holding bracket A
Thermistor holding bracket unit

⑥ Remove the thermal fuse and the thermistor.

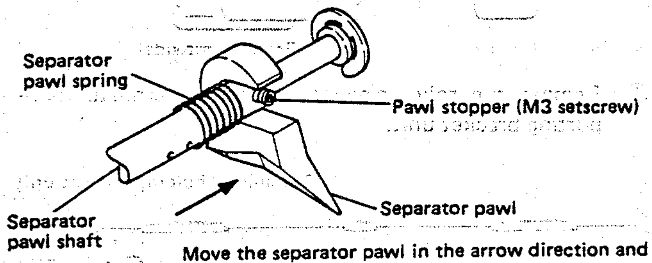

Thermal fuse (169°C)
Thermistor
Remove
Remove


Thermal fuse must be in close contact with the fuse holder.
Fuse holder


Upper heat roller
Thermistor
Thermistor must be in close contact with the upper heat roller.

(4) Separator pawl

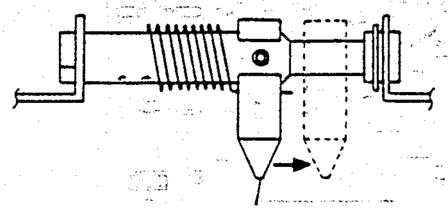
① Hold the separator pawl on the pawl stopper (M3 setscrew) in order to separate the separator pawl from the heat roller.


Separator pawl spring
Pawl stopper (M3 setscrew)
Separator pawl
Separator pawl shaft

Move the separator pawl in the arrow direction and hold the separator pawl on the pawl stopper.

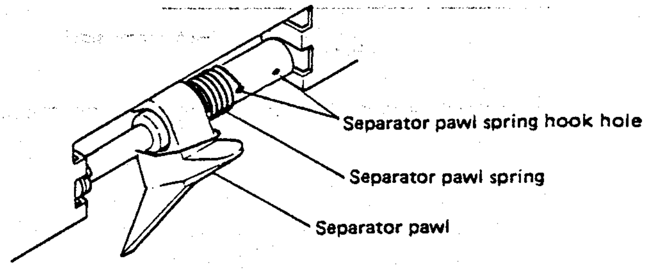
② Remove the fusing cover.

③ Remove the separator pawl from the separator pawl shaft.

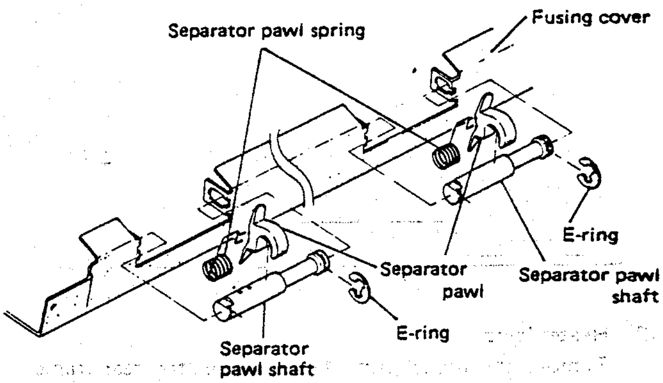


Remove the separator pawl from this position.

④ Separator pawl location


Separator pawl spring hook hole
Separator pawl spring
Separator pawl

⑤ Parts positions

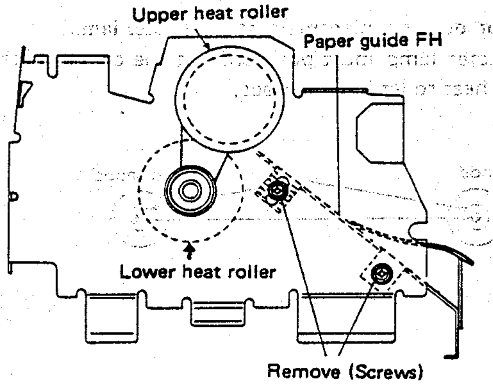

Separator pawl spring
Fusing cover
E-ring
Separator pawl
Separator pawl shaft
E-ring
Separator pawl shaft

(5) Heat rollers

① Remove the fusing cover.
② Remove the heater lamp.
③ Remove the silicone oil cartrige.
④ Remove the electrode cover located on the front and rear frame sides.
⑤ Remove the thermistor holding bracket unit.
⑥ Remove the upper heat roller bearing, then remove the upper heat roller.
⑦ Remove the paper guide FH.

NOTE: As there is a scale notch on the screw (oval hole portion), mark this scale position before the removal of the paper guide FH, so that it can be replaced its original position.

⑧ Remove the lower heat roller.

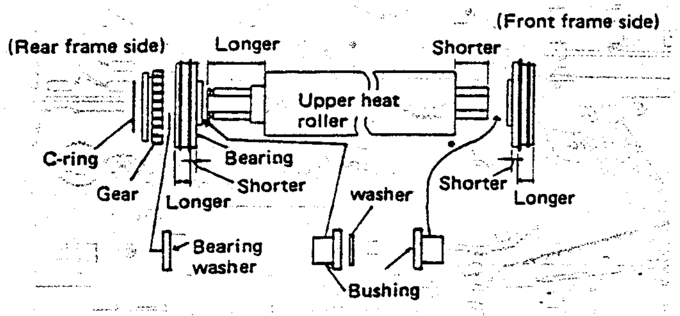

Upper heat roller
Paper guide FH
Lower heat roller
Remove (Screws)

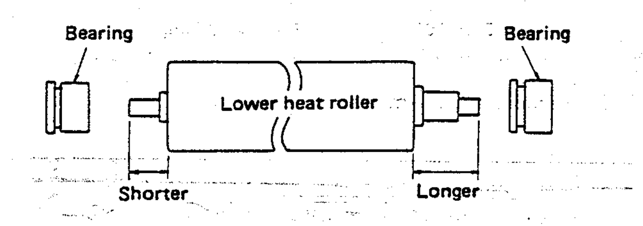
⑨ Cautions when installing the heat roller.

a) Pay attention to the insertion direction of the bearing and gear.

b) Clean the inner surface of the bearing and the gear, and the heat roller shaft, then lube them with grease (UKOG-0062FCZZ).

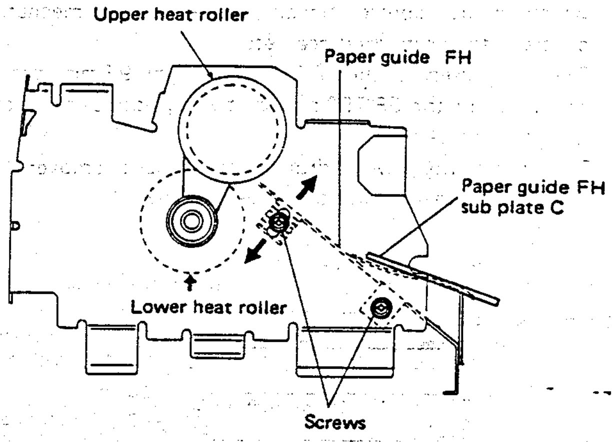
c) Clean the heat roller with alcohol.


(Front frame side)
(Rear frame side)
Longer
Shorter
Upper heat roller
C-ring
Bearing
Gear
Shorter
Longer
washer
Shorter
Longer
Bearing washer
Bushing


(Rear frame side)
(Front frame side)
Bearing
Bearing
Lower heat roller
Shorter
Longer

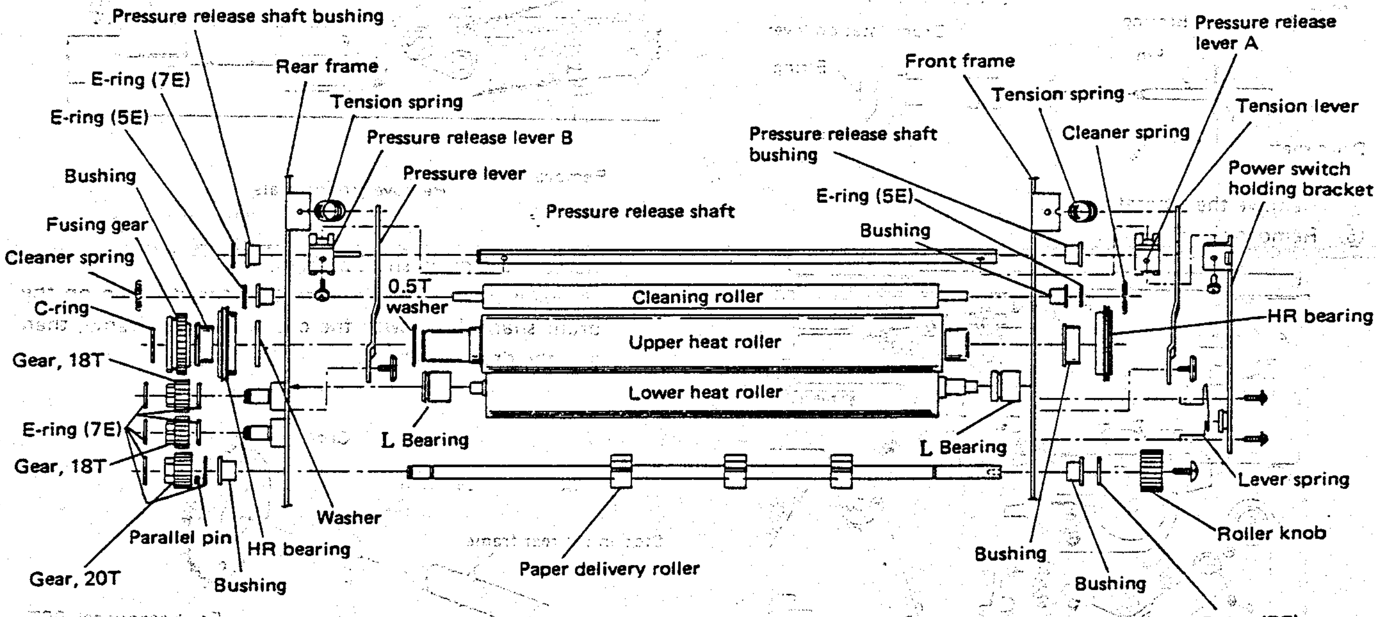
⑩ Paper guide FH location

Paper guide FH must be replaced back to its original position. If wrinkles occur, lower paper guide FH all the way down, then gradually lift it up and secure it in the position where no wrinkles are caused.


Upper heat roller
Paper guide FH
Paper guide FH sub plate C
Lower heat roller
Screws

(6) Disassembly of the fusing unit

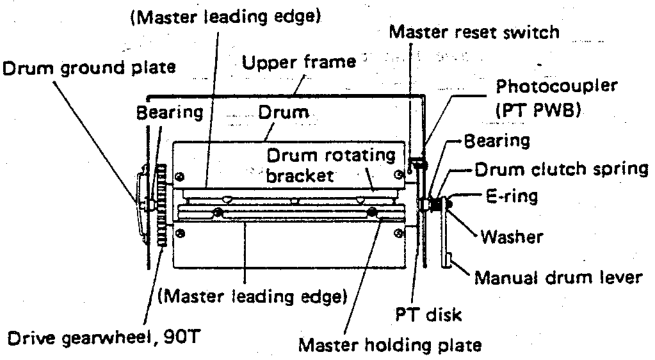
The fusing unit must be disassembled as illustrated below.


Pressure release shaft bushing
E-ring (7E)
Rear frame
E-ring (5E)
Tension spring
Pressure release lever B
Bushing
Pressure lever
Fusing gear
Pressure release shaft
Cleaner spring
C-ring
0.5T washer
Cleaning roller
Gear, 18T
Upper heat roller
Lower heat roller
E-ring (7E)
L Bearing
Gear, 18T
Washer
Parallel pin
HR bearing
Gear, 20T
Bushing
Paper delivery roller
Pressure release lever A
Front frame
Tension spring
Tension lever
Cleaner spring
Pressure release shaft bushing
Power switch holding bracket
E-ring (5E)
Bushing
HR bearing
L Bearing
Lever spring
Roller knob
Bushing
Bushing
E-ring (7E)

[11] DRUM UNIT

1. Outline of the drum unit

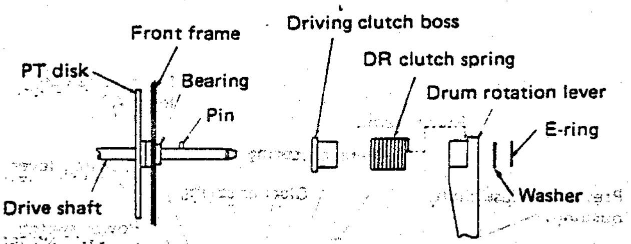
The drum unit consists of the master securing mechanisms, the master end catch plates which are used to hold the leading edge and trailing edge of the master, the PT disk by which various control signals are derived for mechanical controls, the drum drive gear, etc.
The drum used for the SF-755 is longer by 9.5mm than the one used for the SF-750 and the trailing edge of the master is held by three pins.
The reason why a wider drum is used is that a remover sheet is used for paper separation, instead of the roller.


(Master leading edge)
Master reset switch
Drum ground plate
Upper frame
Photocoupler (PT PWB)
Bearing
Drum
Bearing
Drum rotating bracket
Drum clutch spring
E-ring
Washer
Manual drum lever
(Master leading edge)
PT disk
Drive gearwheel, 90T
Master holding plate

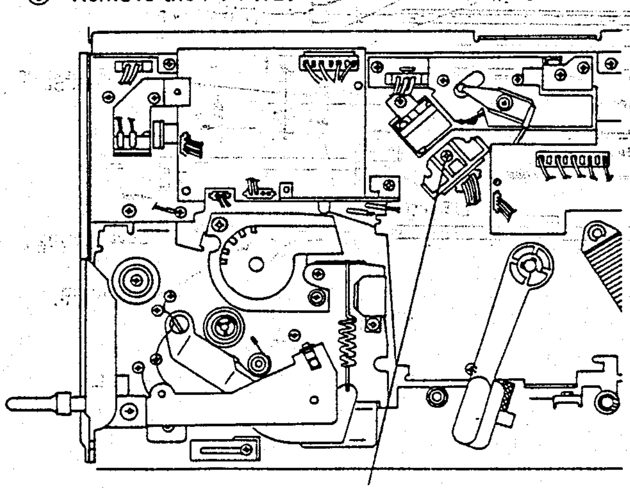
2. Major parts disassembly and assembly

(1) How to remove the drum unit

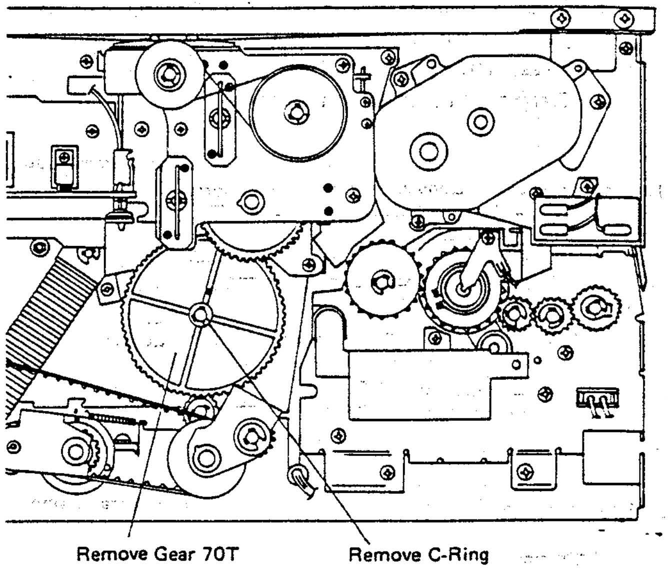
① Open the front exterior and remove the operational panel.
② Remove the rear side upper exterior.
③ Turn the manual drum lever.


Front frame
Driving clutch boss
PT disk
DR clutch spring
Bearing
Drum rotation lever
Pin
E-ring
Drive shaft
Washer

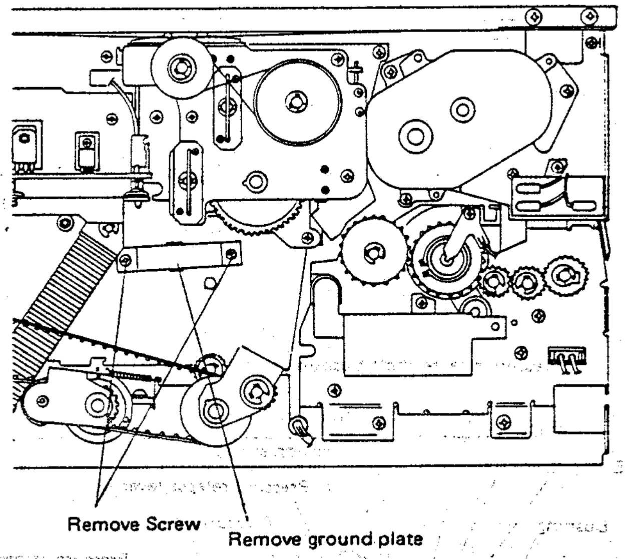
④ Remove the separator unit.
⑤ Remove the PT PWB.


Remove the PT PWB.

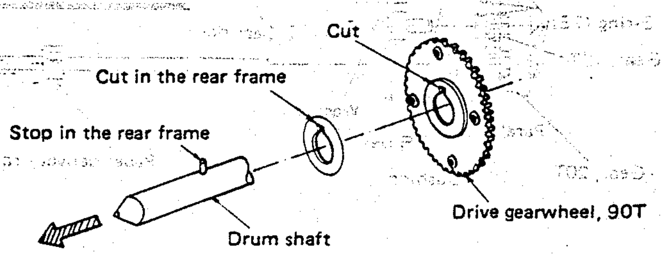
⑥ Remove the discharge lamp unit.
⑦ Remove the 70T gear on the rear frame.


Remove Gear 70T
Remove C-Ring

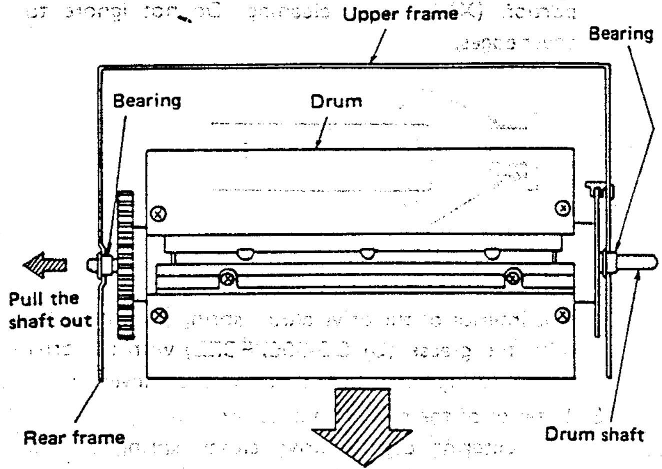
⑧ Remove the drum ground plate.


Remove Screw
Remove ground plate

⑨ Remove the drum shaft bearing.
⑩ Manually rotate the drum so that the stop pin on the drum shaft aligns with the cut in the rear frame, then pull the drum shaft out.


Cut
Cut in the rear frame
Stop in the rear frame
Drive gearwheel, 90T
Drum shaft

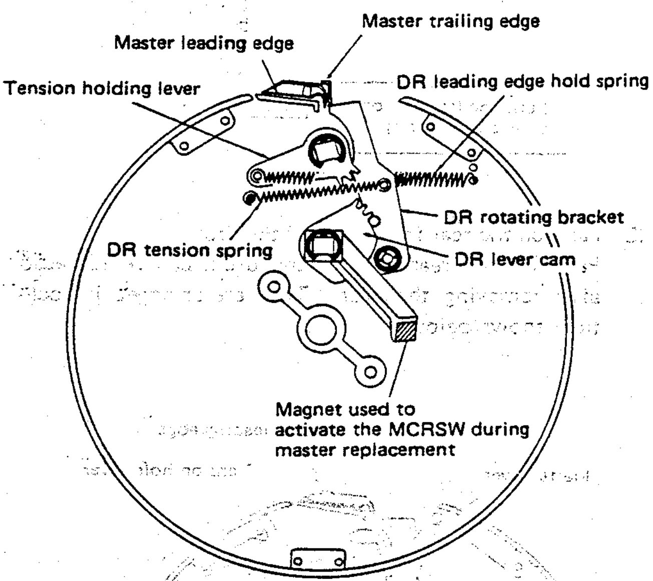
⑪ Pull the drum shaft out thru the rear frame side, while holding the drum by hand.


Upper frame
Bearing
Bearing
Drum
Pull the shaft out
Rear frame
Drum shaft

(2) Parts on the drum

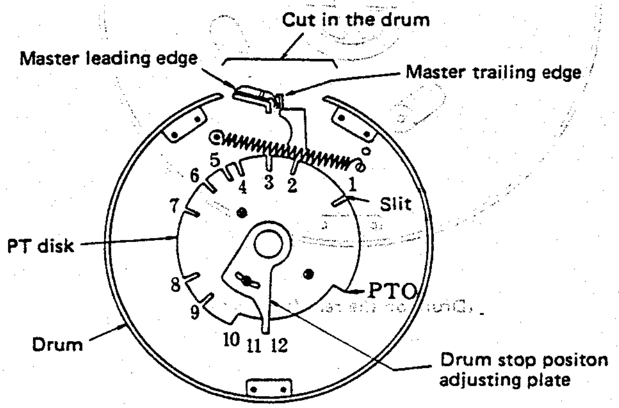
① Parts on the front frame side of the drum

Parts on the front frame side of the drum can be replaced after removing the drum. They are arranged in the locations shown below:


Master trailing edge
Master leading edge
Tension holding lever
DR leading edge hold spring
DR rotating bracket
DR tension spring
DR lever cam
Magnet used to activate the MCRSW during master replacement

a) PT disk installation

The PT disk has to be installed in the direction as shown below. The wide slit of the PT disk must be opposite the cut in the drum.

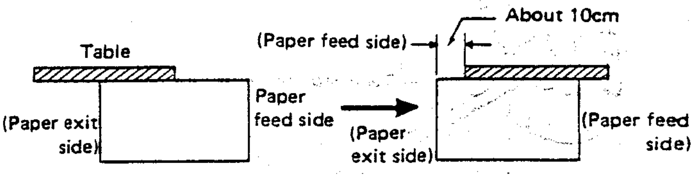

Cut in the drum
Master leading edge
Master trailing edge
5
6
4
3
2
1
Slit
7
PT disk
8
PTO
9
10
11
12
Drum
Drum stop positon adjusting plate

b) PT disk position adjustment

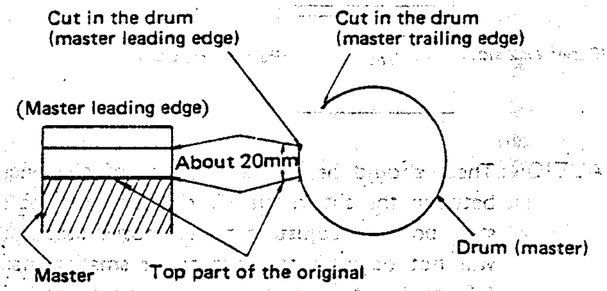
Since drum (master) movement must synchronize with table (original) movement, it can be adjusted by moving the PT disk location.

(Adjustment procedure)

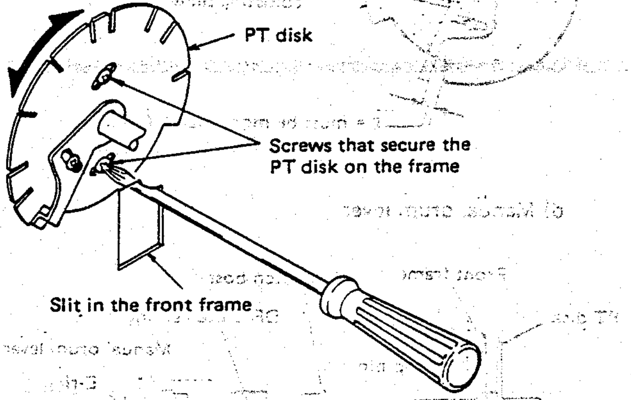
1. Place original on the table.
2. Load the cassette.
3. Execute the test program 23.
4. Turn off the power switch when the table moves about 10cm to the paper exit side.


About 10cm
Table
(Paper feed side)
Paper feed side
(Paper exit side)
(Paper exit side)
(Paper feed side)

5. Open the upper half of the machine and check where the image of the original is formed. If the image at the top edge of the original is about 20mm away from the cut in the drum, the PT disk has been adjusted properly.

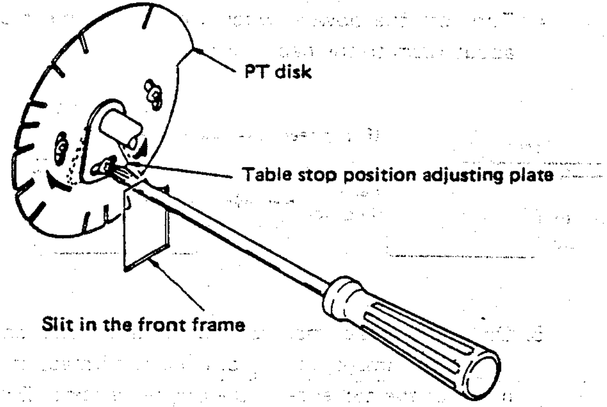

Cut in the drum (master leading edge)
Cut in the drum (master trailing edge)
(Master leading edge)
About 20mm
Drum (master)
Master
Top part of the original

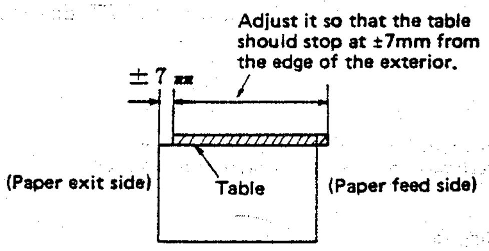
In case the image of the original is not in the proper location, move the PT disk in the arrow direction to adjust.


PT disk
Screws that secure the PT disk on the frame
Slit in the front frame

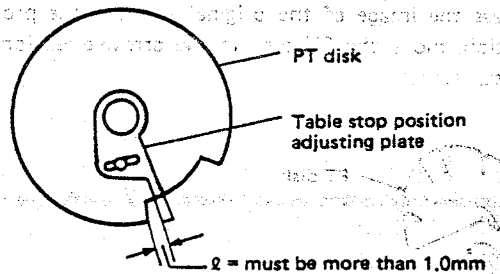
c) Table stop position adjustment

The table stop position adjusting plate is provided for the purpose of stopping the table at the middle part of the machine after termination of the copying operation. Move the table stop position adjusting plate to either direction so that it stops within ±7mm from the edge of the exterior.

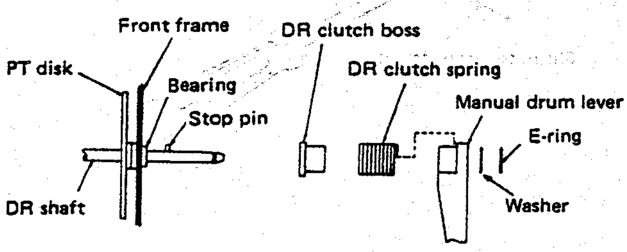

PT disk
Table stop position adjusting plate
Slit in the front frame


Adjust it so that the table should stop at ±7mm from the edge of the exterior.
±7mm
(Paper exit side)
Table
(Paper feed side)

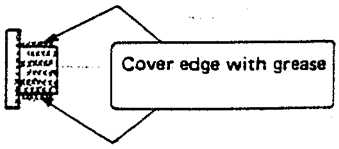
CAUTION: There should be at least 1.0mm of clearance between the slit in the PT disk and the table stop position adjusting plate. Proper stopping will not occur if the distance is smaller than 1.0mm and the drum will continue to rotate.


PT disk
Table stop position adjusting plate
ℓ = must be more than 1.0mm

d) Manual drum lever

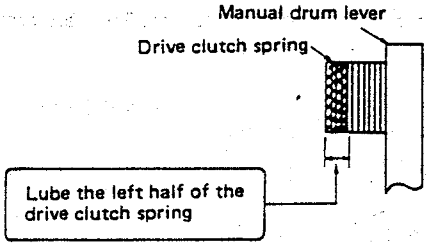

Front frame
PT disk
Bearing
Stop pin
DR shaft
DR clutch boss
DR clutch spring
Manual drum lever
E-ring
Washer

1. Drive clutch boss
Spread grease (UKOG-0062FCZZ) on the shadowed portion (XXX) after cleaning. Do not ignore to cover edges.

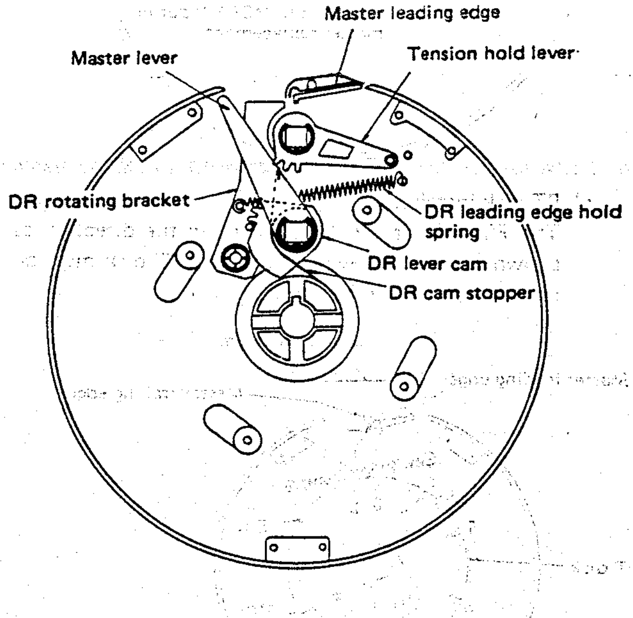

Cover edge with grease

2. Interior of the drive clutch spring
The interior of the drive clutch spring must be lubed with the grease (UKOG-0062FCZZ) with the drive clutch spring fitted to the manual drum lever.

3. Exterior of the drive clutch spring
The exterior of the drive clutch spring on the shadowed portion (XXX) must be lubed with the grease (UKOG-0062FCZZ) after the clutch boss is fitted to the drive clutch spring.


Manual drum lever
Drive clutch spring
Lube the left half of the drive clutch spring

(2) Parts on the rear frame side of the drum
Parts on the rear side of the drum can be replaced after removing the drum. They are arranged in locations shown below:


Master leading edge
Master lever
Tension hold lever
DR rotating bracket
DR leading edge hold spring
DR lever cam
DR cam stopper

(Drum on the rear frame side)

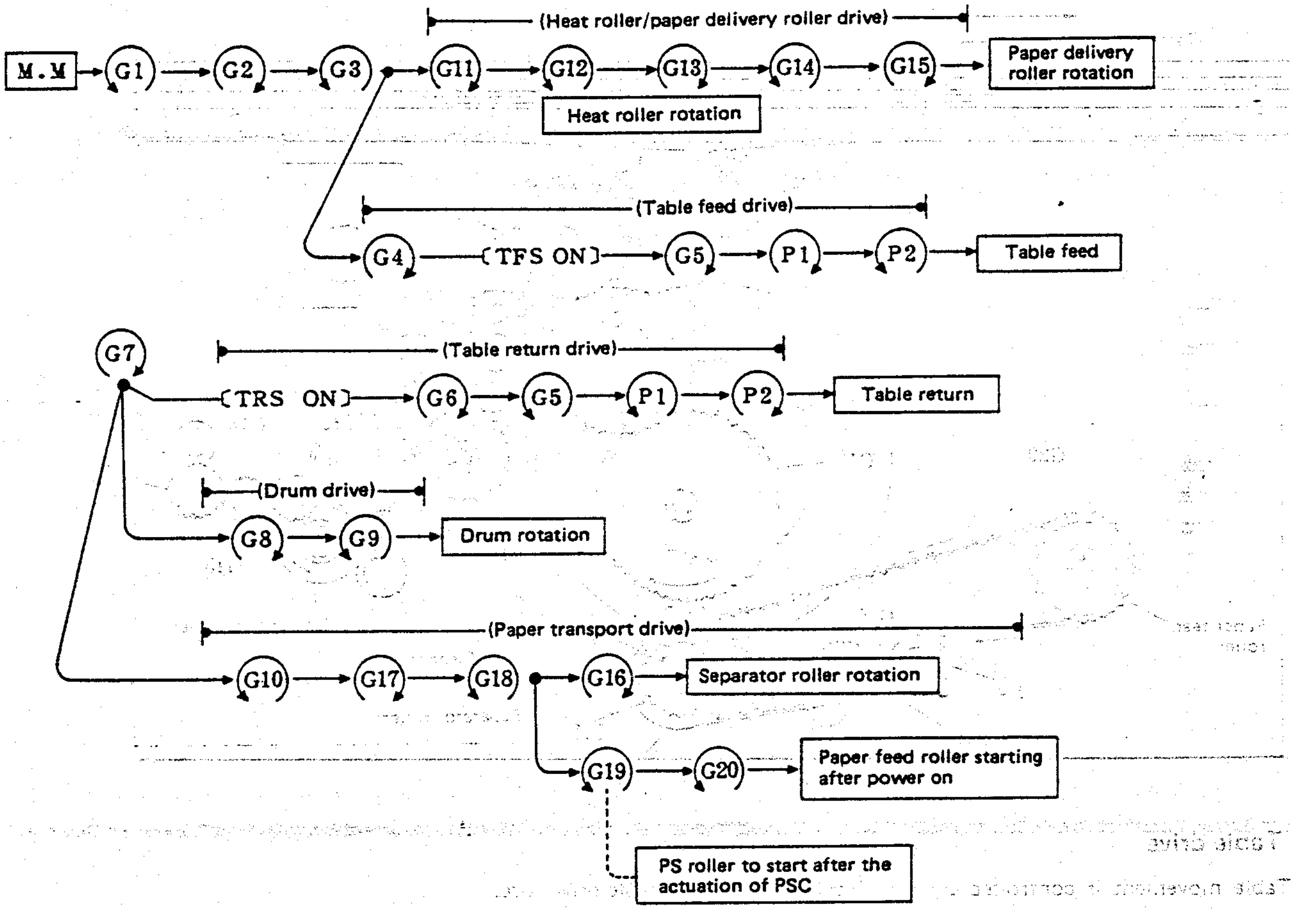
[12] DRIVE UNIT

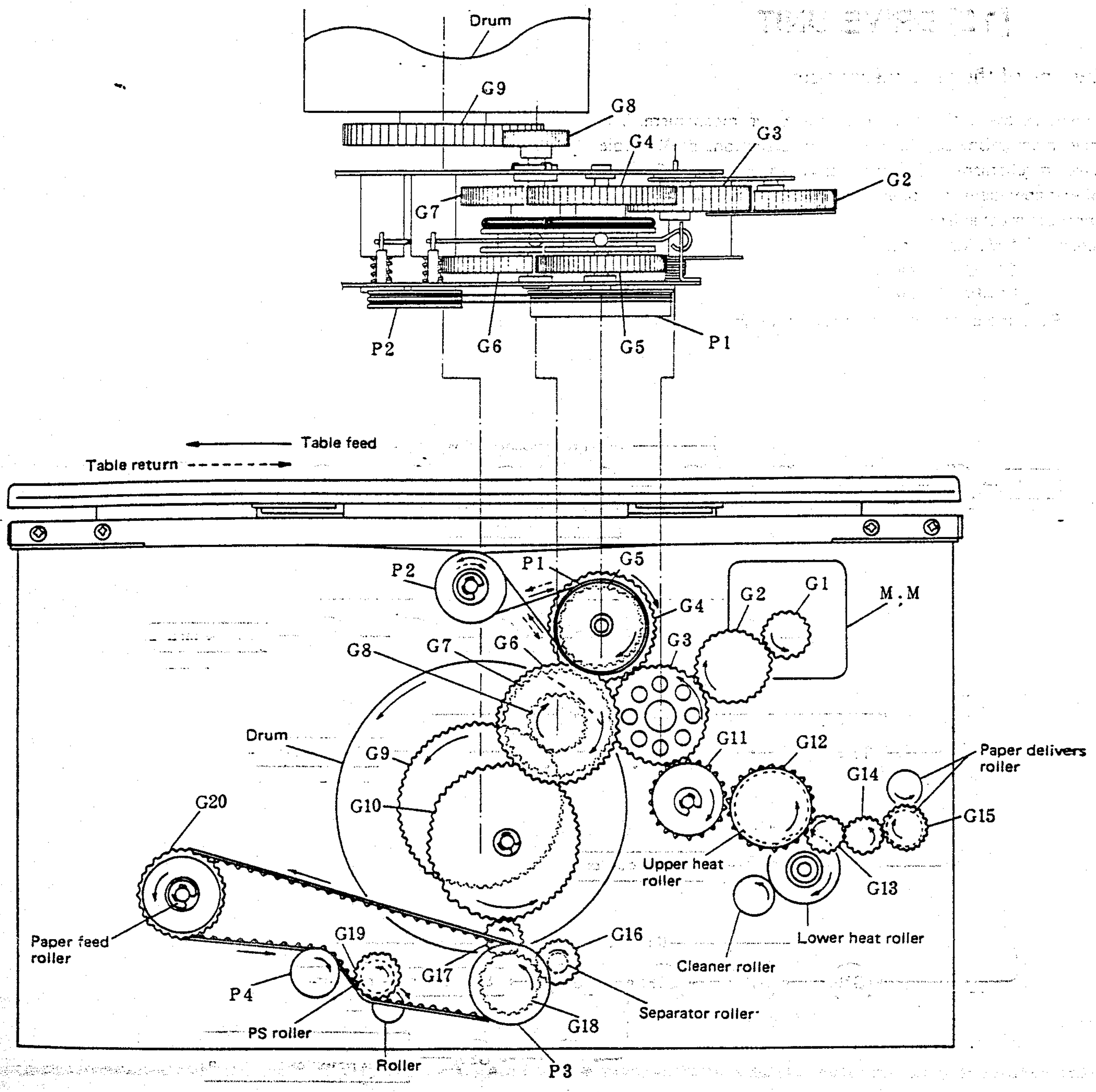
1. Outline of the drive mechanism

Shown below is the outline of the drive mechanism. The drive mechanism can be divided into sections of (1) table drive mechanism, (2) drum drive mechanism, (3) heat roller/paper delivery roller drive mechanism, and (4) paper transport mechanism.

Legend:
- MM: Main motor
- G1–G20: Gears
- P1–P4: Pulleys

: Rotating direction of gears and pulleys


(Heat roller/paper delivery roller drive)
M.M
G1
G2
G3
G11
G12
G13
G14
G15
Paper delivery roller rotation
Heat roller rotation
(Table feed drive)
G4
〔TFS ON〕
G5
P1
P2
Table feed
G7
(Table return drive)
〔TRS ON〕
G6
G5
P1
P2
Table return
(Drum drive)
G8
G9
Drum rotation
(Paper transport drive)
G10
G17
G18
G16
Separator roller rotation
G19
G20
Paper feed roller starting after power on
PS roller to start after the actuation of PSC

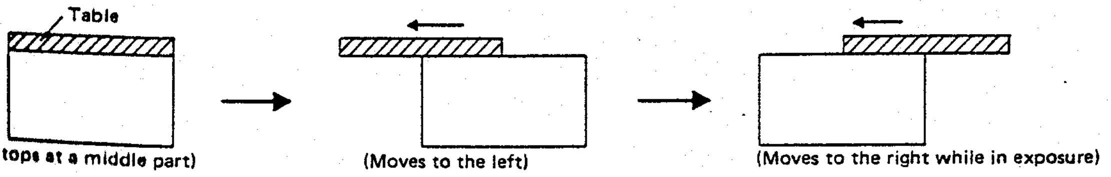

Drum
G9
G8
G4
G3
G2
G7
P2
G6
G5
P1
Table feed
Table return
P2
P1
G5
G4
G2
G1
M.M
G8
G7
G6
G3
Drum
G9
G11
G12
Paper delivers roller
G14
G20
G10
G15
Upper heat roller
G13
Paper feed roller
G19
G16
Lower heat roller
G17
Cleaner roller
P4
G18
Separator roller
PS roller
Roller
P3

2. Table drive

Table movement is controlled by the clutch unit and the table drive wire.

(1) Table movement (Figure as seen from the front frame side)

① Table feed

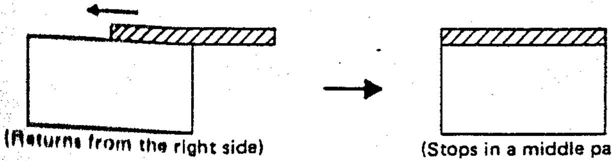


(Stops at a middle part)

(Moves to the left)

(Moves to the right while in exposure)

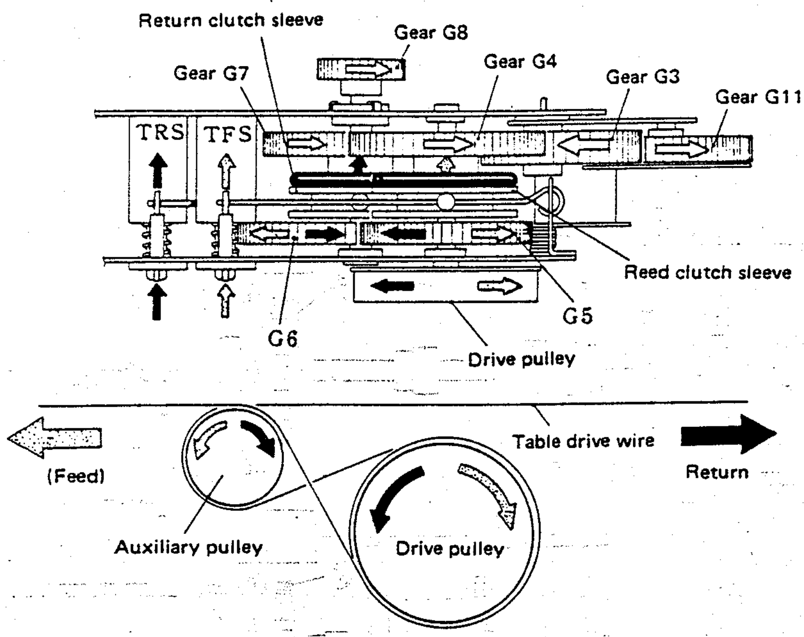
② Table return



(Returns from the right side)

(Stops in a middle part)

(2) Movement of clutch unit


Return clutch sleeve
Gear G8
Gear G7
Gear G4
Gear G3
Gear G11
TRS
TFS
Reed clutch sleeve
G5
G6
Drive pulley
Table drive wire
(Feed)
Return
Auxiliary pulley
Drive pulley

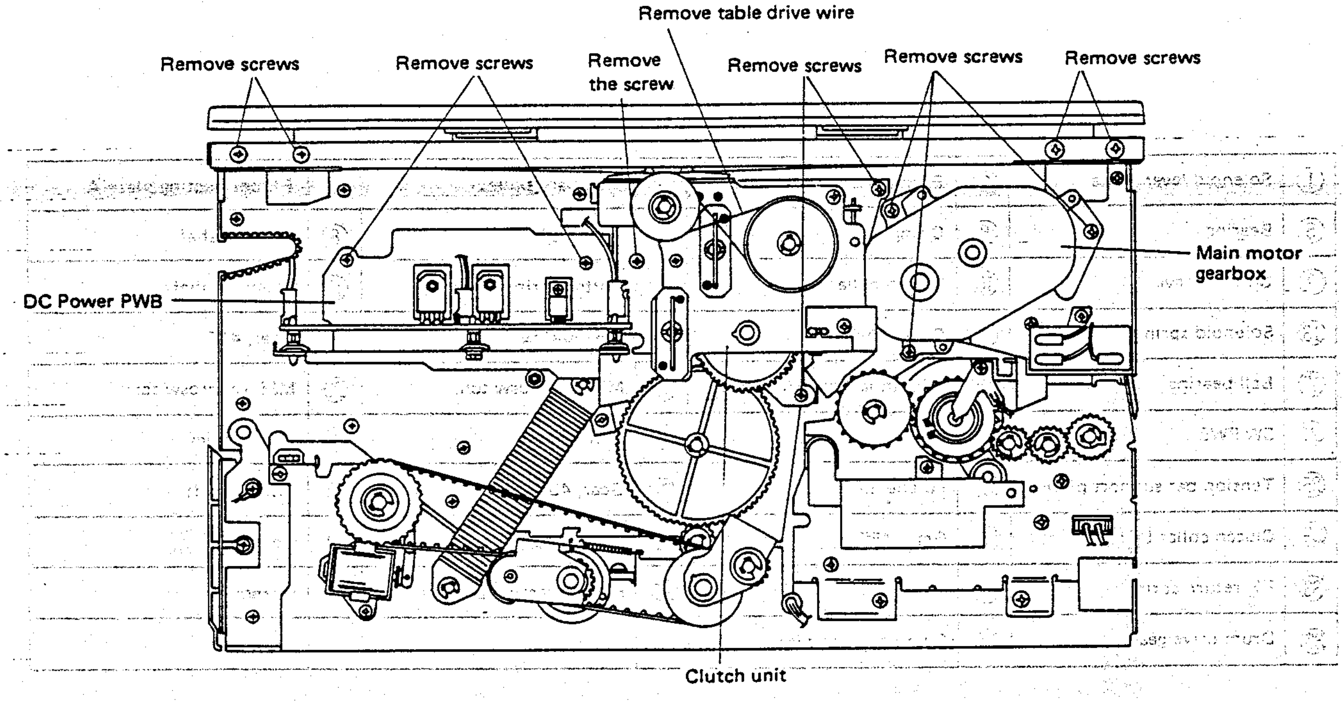
① Action of gear train composed of G3, G4, G7, and G8
The gear G3 is driven by the main motor and rotates the arrow direction through the gear train composed of the gear G3, G4, G7 and G8.

② Action during table feed
With actuation of the table feed solenoid, the tension shaft presses the table feed clutch sleeve so that the spring clutch tightens. This makes the rotation of gear G4 conveyed to gear G5 which makes the drive pulley rotated in the arrow direction to move the table forward.

③ Action during table return
With actuation of the table return solenoid, the tension shaft presses the table return clutch sleeve so that the spring coutch tightens. This makes the rotation of gear G7 conveyed to gear G5 via gear G6 which makes the drive pulley rotated in the arrow direction to return the table.

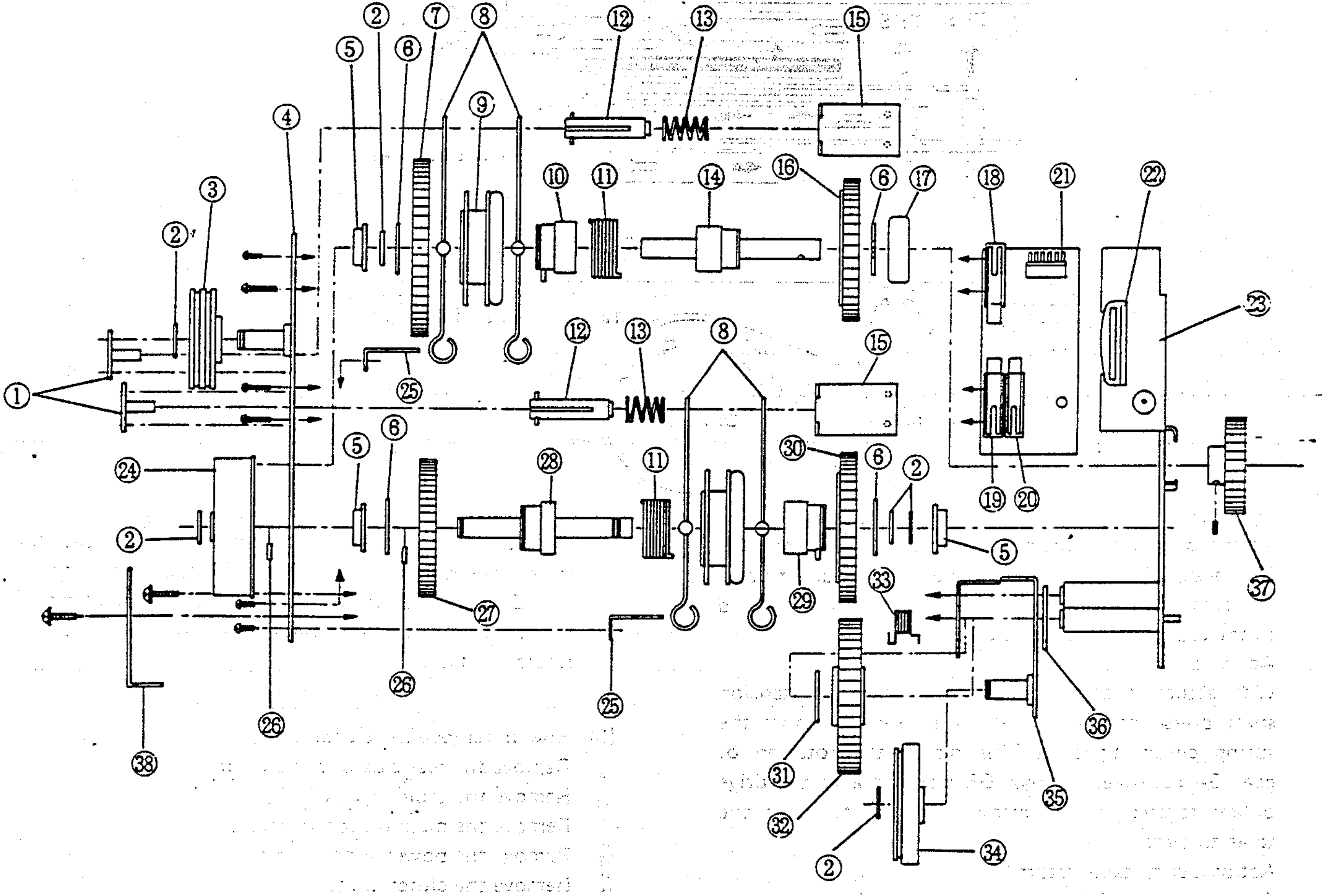
(3) How to remove the clutch unit.

① Remove the rear side upper exterior.
② Remove the table drive wire.
③ Remove the main motor gearbox.
④ Remove the power supply unit.
⑤ Remove the clutch unit.


Remove table drive wire
Remove screws
Remove screws
Remove the screw
Remove screws
Remove screws
Remove screws
Main motor gearbox
DC Power PWB
Clutch unit

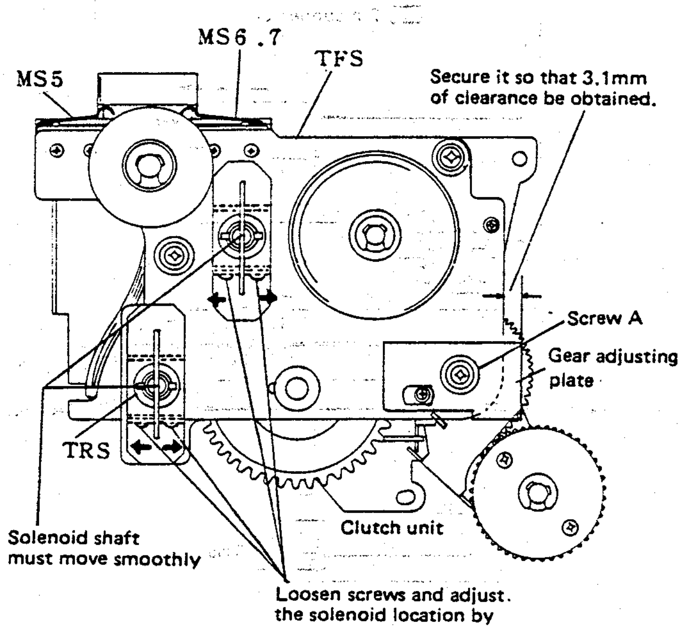
(4) Disassembly of the clutch unit

The clutch unit can be disassembled according to the breakdown figure below.



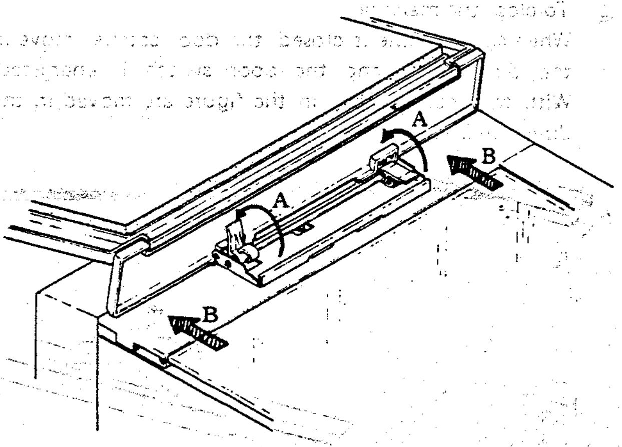
①	Solenoid lever guide	②	E-ring (5E)	③	Auxiliary pulley	④	FX connecting plate A
⑤	Bearing	⑥	C-ring	⑦	Gear, 72T	⑧	Tension shaft
⑨	Clutch sleeve	⑩	Clutch collar A	⑪	Clutch spring	⑫	Solenoid shaft
⑬	Solenoid spring	⑭	Clutch shaft A	⑮	Solenoid coil	⑯	Gear, 42T
⑰	Ball bearing	⑱	MS5 (microswitch)	⑲	MS7 (microswitch)	⑳	MS6 (microswitch)
㉑	SW PWB	㉒	Brake	㉓	Drive frame	㉔	Drive pulley
㉕	Tension bar support plate	㉖	Parallel pin	㉗	Gear, 40T	㉘	Clutch shaft
㉙	Clutch collar B	㉚	Gear, 45T	㉛	E-ring (7E)	㉜	Gear, 45T
㉝	FX return spring	㉞	Gear, 35T	㉟	FX connecting plate	㊱	Washer
㊲	Drum drive gear	㊳	Gear adjusting plate				

NOTE: After assembly of the clutch unit, make sure that the TFS and TRS solenoid shafts move smoothly. If proper movement is impeded, move the solenoid in the arrow direction. Adjust the gear adjusting plate with screw A so that the distance between the clutch unit frame and the adjusting plate is 3.1mm.


MS6 .7
MS5
TFS
Secure it so that 3.1mm of clearance be obtained.
Screw A
Gear adjusting plate
TRS
Solenoid shaft must move smoothly
Clutch unit
Loosen screws and adjust. the solenoid location by

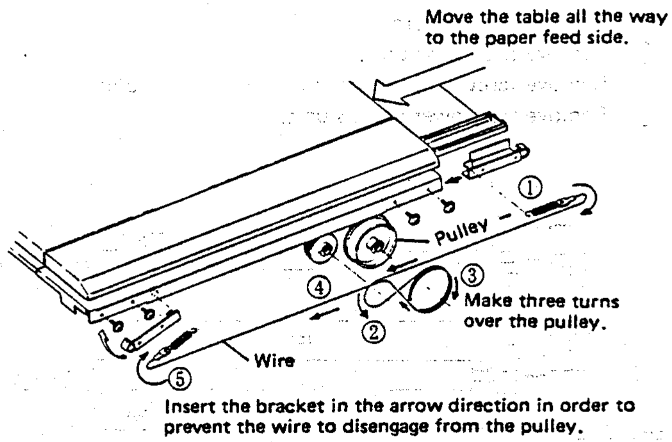
(5) How to remove the original cover

Turn the original cover lock lever in the arrow direction and pull it out in arrow direction B while lifting it up slightly.

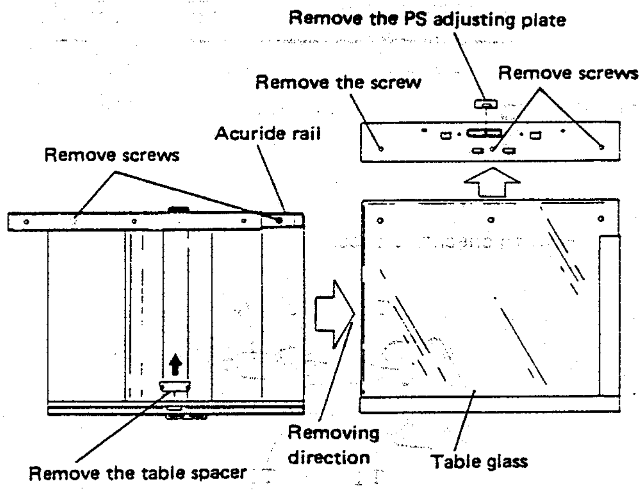


(6) How to install the table drive wire

Stretch the table drive wire in steps ① to ⑤.

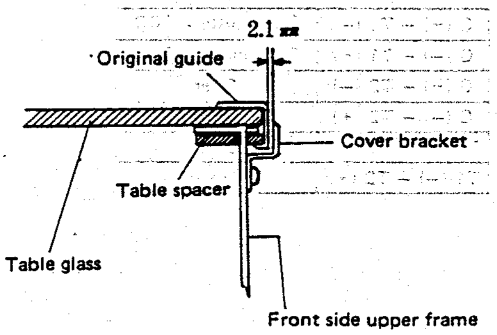

Move the table all the way to the paper feed side.
①
Pulley
③
Make three turns over the pulley.
④
②
Wire
⑤
Insert the bracket in the arrow direction in order to prevent the wire to disengage from the pulley.

(7) Disassembly of the original table


Remove the PS adjusting plate
Remove the screw
Remove screws
Acuride rail
Remove screws
Removing direction
Table glass
Remove the table spacer

(8) Original table location

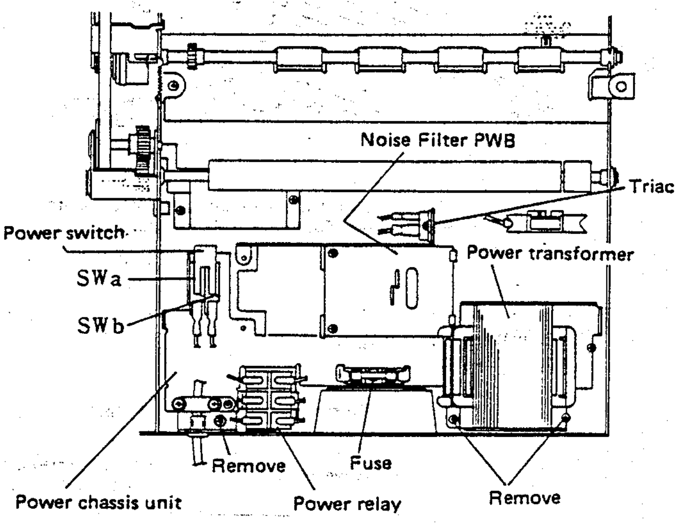
To secure the original table position, move and adjust the acuride rail to either side of the frames so that the distance between the cover bracket and the original guide is 2.1mm.


2.1 mm
Original guide
Cover bracket
Table spacer
Table glass
Front side upper frame

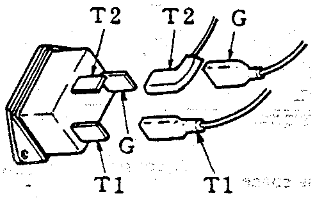
[13] MISCELLANEOUS

(1) How to remove the power chassis unit

① Remove the AC cord.
② Remove the fusing unit.
③ Remove screws that secure the power chassis unit.
④ Remove the power chassis unit.


Noise Filter PWB
Triac
Power switch
SWa
SWb
Power transformer
Remove
Fuse
Power chassis unit
Power relay
Remove

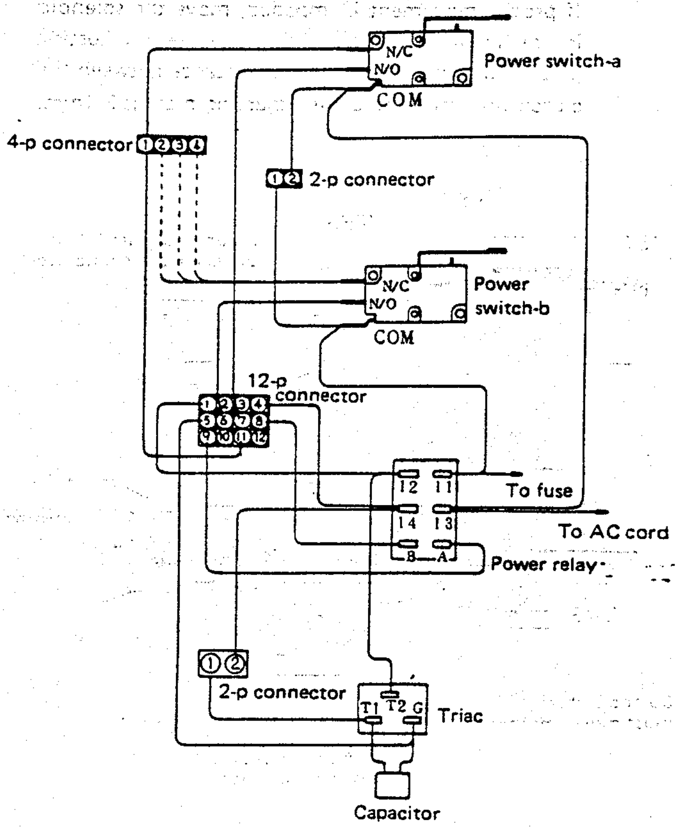
How to check the triac.


T2
T2
G
G
T1
T1

The following conditions should be seen when measured with the ohmmeter in the x 1K ohms range.
(+): Indicates (+) terminal of the ohmmeter.
(−): Indicates (−) terminal of the ohmmeter.

G (+) − T1 (−)	Continuity ≈ 70Ω
G (−) − T1 (+)	Continuity ≈ 70Ω
G (+) − T2 (−)	Open
G (−) − T2 (+)	Open
T1 (+) − T2 (−)	Open
T1 (−) − T2 (+)	Open

(2) Power unit (power switch, triac, wirings) power relay


N/C
N/O
Power switch-a
COM
4-p connector
①②③④
①② 2-p connector
N/C
N/O
Power switch-b
COM
12-p connector
①②③④
⑤⑥⑦⑧
⑨⑩⑪⑫
12
11
14
13
B
A
To fuse
To AC cord
Power relay
①②
2-p connector
T1
T2
G
Triac
Capacitor

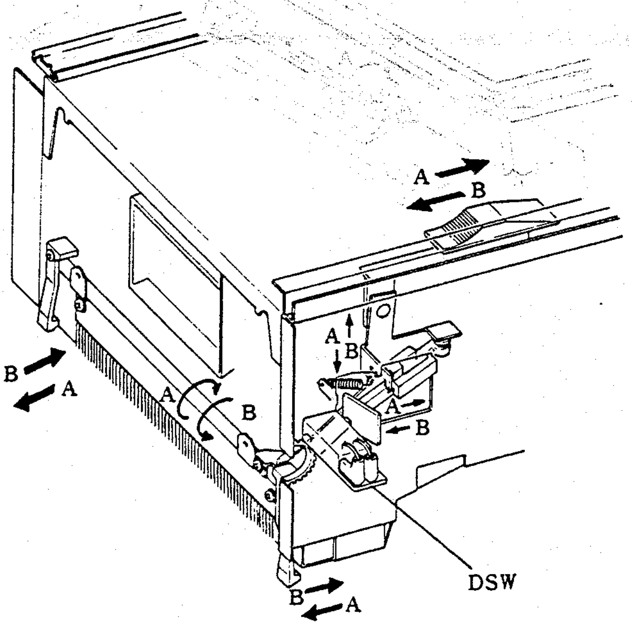
(3) Action of the door switch (DSW) and door opening lever

① To open the machine

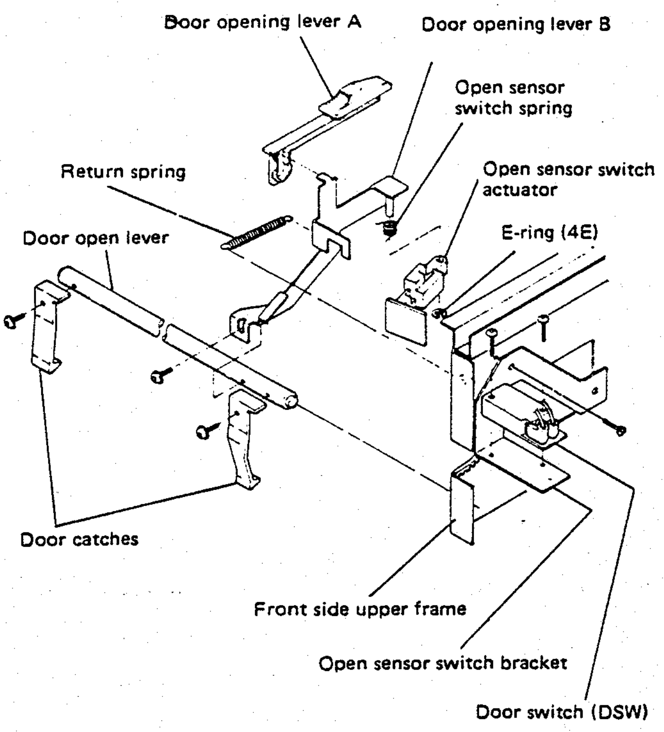
To open the machine, move the door opening lever A in direction A to deenergize the doorswitch and to disengage the door catches. With this components in the following figure moves in the direction A.

② To close the machine.

When the machine is closed, the door catches move in the direction B and the door switch is energized. With this, components in the figure are moved in the direction B.

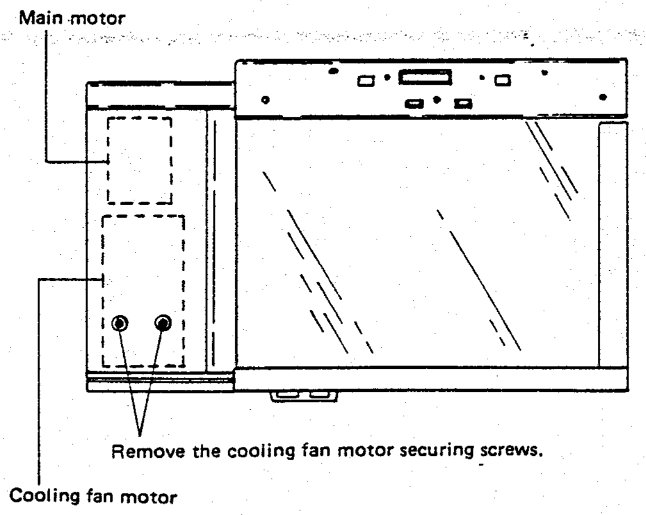

A
B
B
A
A
B
A
B
A
B
B
A
DSW
B
A

(4) Disassembly of the door switch (DSW)

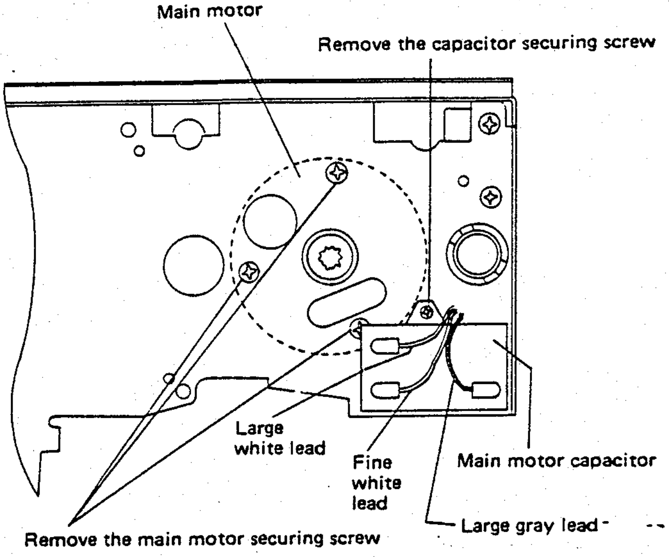

Door opening lever A
Door opening lever B
Open sensor switch spring
Return spring
Open sensor switch actuator
E-ring (4E)
Door open lever
Door catches
Front side upper frame
Open sensor switch bracket
Door switch (DSW)

(5) How to remove the main motor, cooling fan motor

① Open the front exterior and remove the operational panel unit.
② Open the clam shell and remove the rear side upper exterior.
③ Remove the main motor capacitor on the rear frame side.
④ Remov the Copy Lamp Regulator PWB on the front frame side.
⑤ Remove the paper guide G.
⑥ Move the original table to the right.
⑦ Remove the cooling fan motor securing screws, disconnect connector, and remove the motor.

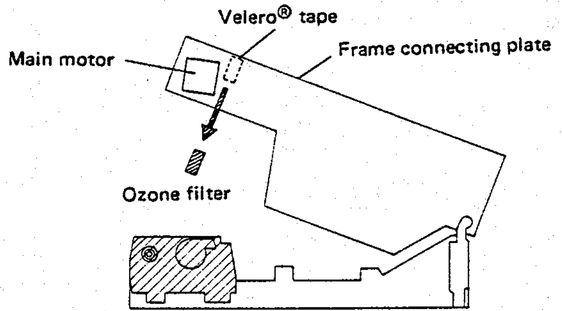

Main motor
Remove the cooling fan motor securing screws.
Cooling fan motor

⑧ Remove the main motor gearbox.
⑨ Remove three screws that secure the main motor, disconnect connector, then remove the motor.

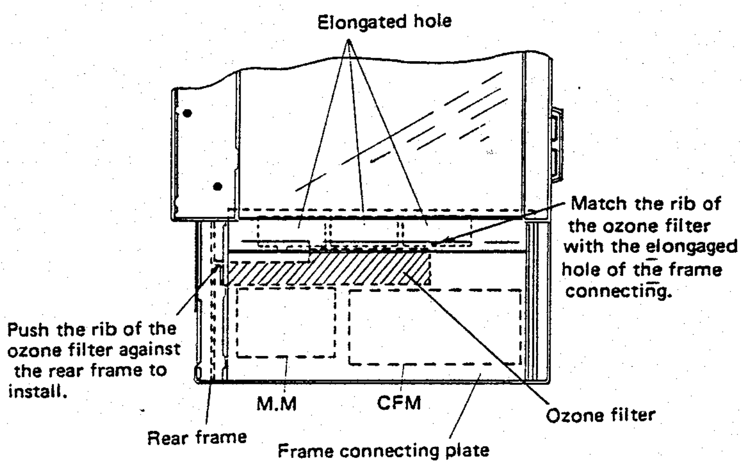

Main motor
Remove the capacitor securing screw
Large white lead
Fine white lead
Main motor capacitor
Large gray lead
Remove the main motor securing screw

(6) How to replace the ozone filter

① Open the front cover and remove the operation panel.
② Open the clam shell and remove the rear side upper exterior.
③ Remove the main motor capacitor on the rear frame side.
④ Remove the Copy Lamp Regulator PWB on the front frame side.
⑤ Remove paper guide G.
⑥ Remove the ozone filter from the frame connecting plate.


Velero® tape
Main motor
Frame connecting plate
Ozone filter

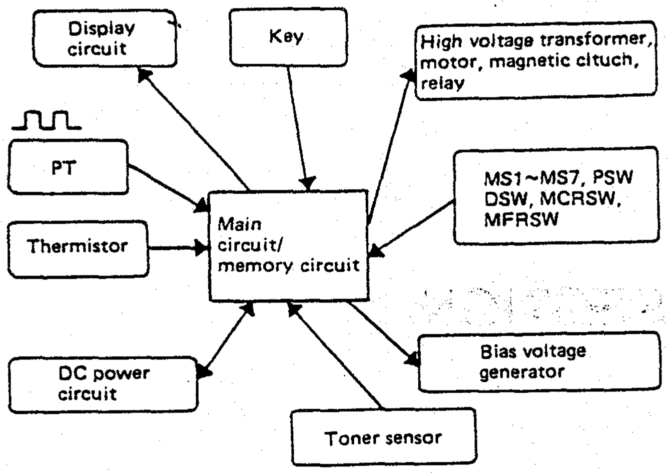
(Install the ozone filter on the following location)


Elongated hole
Match the rib of the ozone filter with the elongaged hole of the frame connecting.
Push the rib of the ozone filter against the rear frame to install.
M.M
CFM
Ozone filter
Rear frame
Frame connecting plate

The ozone filter must be replaced every 160,000 copies.

ELECTRICAL SECTION

1. Block diagram


Display circuit
Key
High voltage transformer, motor, magnetic cltuch, relay
PT
MS1~MS7, PSW DSW, MCRSW, MFRSW
Thermistor
Main circuit/ memory circuit
Bias voltage generator
DC power circuit
Toner sensor

2. Signal names

(1) Switches

Switch name	Function
MS1	Paper entry
MS2	Paper separation
MS3	Paper exit
MS4	Manual paper feed
MS5	Table feed start position
MS6	PSC actuating switch (for leading edge adjustment)
MS7	Table overrun
MCRSW	Master counter reset switch
DSW	Door switch
MSW	Power on/off switch
MFRSW	Misfeed reset switch
PSW	Print switch

(2) Magnetic clutch, solenoid

TFS	Table feed solenoid
TRS	Table return solenoid
PSC	Paper stopper clutch (active when MS6 is on)
PFS	Paper feed solenoid (active with PT0 of PT disk)

(3) Motors

MM	Main motor
CFM	Cooling fan motor
TM	Toner motor

(4) High voltage transformers

Switch name	Function
MHVG	Main high voltage transformer
THVG	Transfer high voltage transformer
DHVG	Discharge high voltage transformer

(5) Relays

PR	Power relay
MMR	Main motor relay
TMR	Toner motor relay
DLR	Discharge lamp relay

(6) Lamps and LED's

CL	Copy lamp
HL	Heater lamp
DL	Discharge lamp
RPL	Ready lamp (flashes when maintenance is required)
MISSL	Misfeed indicator (LED) (flashes when misfeed occurrs)
TEL	Toner refill indicator (LED)
MPL	Master replace indicator (LED)
PL	Pause indicator (LED)
REL	Repeat indicator (LED)
MFL	Manual feed indicator (LED)
PDPL	Power down indicator

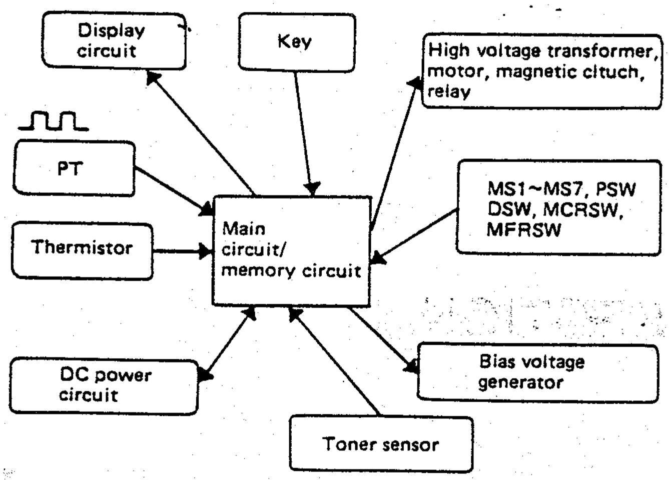
3. Main circuit, including the memory circuit

(1) *LSI signal description*
IC311 (μPD7801G-122)

Pin No.	Signal name	Function
1	PR	Power relay
2	NC	–
3	IN5	Common signal
4	IN4	Common signal
5	IN3	Common signal
6	IN2	Common signal
7	IN1	Common signal
8	IN0	Common signal
9 ~ 13	GND	0V
14	$\overline{\text{WAIT}}$	Pulled up to VD1 (+5V)
15~17	NC	–
18	$\overline{\text{KI1}}$	Key input
19	DP0	Data transfer signal from the Main Control LSI to the Memory LSI, active high (+5V)
20	EN0	Data transfer enable signal from the Main Control SLI to the Memory LSI, active high (+5V) of this signal
22	DHV	Discharge high voltage signal, DHVG on (+5V).
23	$\overline{\text{KI2}}$	Key input
24	PT	PT slit signal (PT1–PT12)
25	TMR	Toner motor relay, active high (+5V)
26	$\overline{\text{SCK}}$	Pulled up to VD1 (+5V)
27	GND	0V
28	NC	–
29	$\overline{\text{IR}}$	Initial reset
30	X2	Clock pulse
31	X1	Clock pulse

ELECTRICAL SECTION

1. Block diagram


Display circuit
Key
High voltage transformer, motor, magnetic cltuch, relay
PT
Thermistor
Main circuit/ memory circuit
MS1~MS7, PSW DSW, MCRSW, MFRSW
DC power circuit
Bias voltage generator
Toner sensor

2. Signal names

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MS7	Table overrun
MCRSW	Master counter reset switch
DSW	Door switch
MSW	Power on/off switch
MFRSW	Misfeed reset switch
PSW	Print switch

(2) Magnetic clutch, solenoid

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TRS	Table return solenoid
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PFS	Paper feed solenoid (active with PT0 of PT disk)

(3) Motors

MM	Main motor
CFM	Cooling fan motor
TM	Toner motor

(4) High voltage transformers

Switch name	Function
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THVG	Transfer high voltage transformer
DHVG	Discharge high voltage transformer

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DLR	Discharge lamp relay

(6) Lamps and LED's

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HL	Heater lamp
DL	Discharge lamp
RPL	Ready lamp (flashes when maintenance is required)
MISSL	Misfeed indicator (LED) (flashes when misfeed occurrs)
TEL	Toner refill indicator (LED)
MPL	Master replace indicator (LED)
PL	Pause indicator (LED)
REL	Repeat indicator (LED)
MFL	Manual feed indicator (LED)
PDPL	Power down indicator

3. Main circuit, including the memory circuit

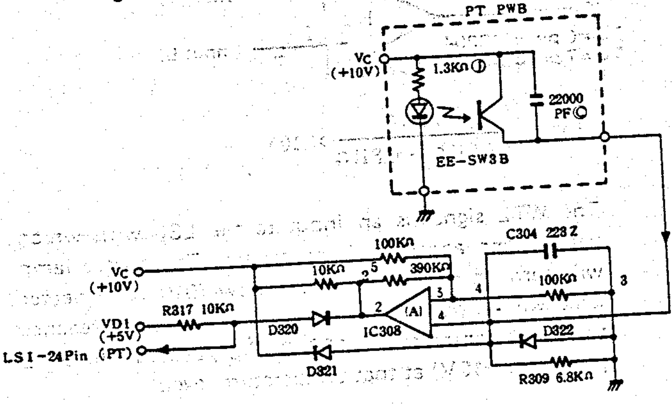
(1) LSI signal description
IC311 (µPD7801G-122)

Pin No.	Signal name	Function
1	PR	Power relay
2	NC	–
3	IN5	Common signal
4	IN4	Common signal
5	IN3	Common signal
6	IN2	Common signal
7	IN1	Common signal
8	IN0	Common signal
9 ~ 13	GND	0V
14	$\overline{\text{WAIT}}$	Pulled up to VD1 (+5V)
15~17	NC	–
18	$\overline{\text{KI1}}$	Key input
19	DP0	Data transfer signal from the Main Control LSI to the Memory LSI, active high (+5V)
20	EN0	Data transfer enable signal from the Main Control SLI to the Memory LSI, active high (+5V) of this signal
22	DHV	Discharge high voltage signal, DHVG on (+5V).
23	$\overline{\text{KI2}}$	Key input
24	PT	PT slit signal (PT1–PT12)
25	TMR	Toner motor relay, active high (+5V)
26	$\overline{\text{SCK}}$	Pulled up to VD1 (+5V)
27	GND	0V
28	NC	–
29	$\overline{\text{IR}}$	Initial reset
30	X2	Clock pulse
31	X1	Clock pulse

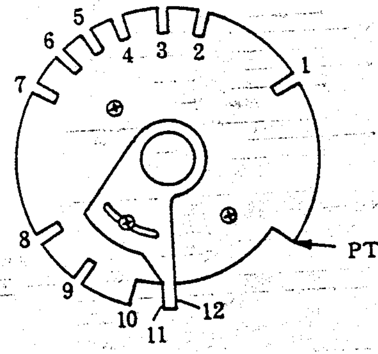
Pin.No.	Signal name	Function
32	GND	0V
33	S4	Strobe signal (switch sensing)
34	TFS	Table feed solenoid
35	S3	Strobe signal (switch sensing)
36	TRS	Table return solenoid
37	S2	Strobe signal (switch sensing)
38	DLR	Discharge lamp relay
39	S1	Strobe signal (switch sensing)
40	MMR	Main motor relay, active high (+5V)
41	BS	Bias signal
42	PFS	Paper feed solenoid, active high (+5V)
43	PSC	Paper stop clutch, active high (+5V)
44	BS2	Bias signal (−150V) with a low (0V) and −198V with a high (+5V).
45	ENI	Data transfer enable signal from the Memory LSI to the Main Control LSI, active high
46	$\overline{W1}$	Strobe signal
47	DT1	Data transfer signal from the Memory LSI to the Main Control LSI.
48	$\overline{W0}$	Strobe signal
49	7Sc	LED segment signal c
50	7Sb	LED segment signal b
51	7Sa	LED segment signal a
52	7Sg	LED segment signal g
53	7Se	LED segment signal e
54	7Sd	LED segment signal d
55	7Sf	LED segment signal f
56	TC	Total counter output signal
57	CLR	Copy lamp activating signal
58	MHV	Main high voltage signal, MHVG on (+5V).
59	MDL3	Display select signal
60	MDL2	Display select signal (second display digit)
61	MDL1	Display select signal (first display digit)
62	HL	Heater lamp on signal
63	RPL	Ready pilot lamp signal, active high (+5V)
64	VD1	Power supply (+5V)

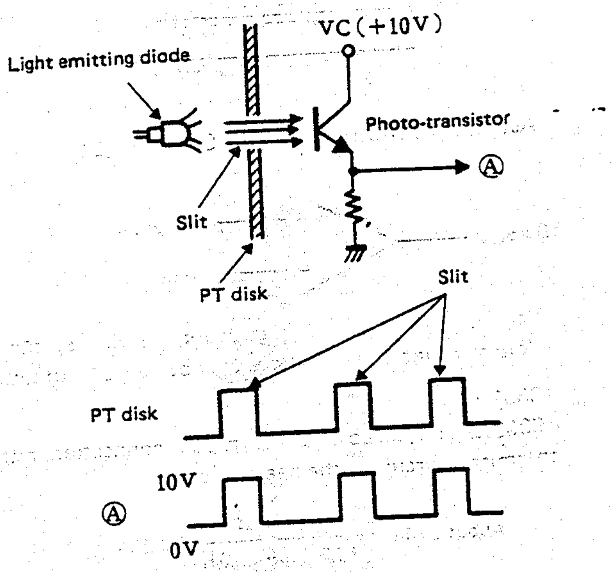
(2) PT signal generator

PT signal determines operational timing of each load.


PT PWB
Vc (+10V)
1.3KΩ ①
22000 PF ©
EE-SW3B
C304 223Z
100KΩ
10KΩ
5
390KΩ
3
4
2
(A)
IC308
100KΩ
3
Vc (+10V)
R317 10KΩ
VD1 (+5V)
LSI-24Pin (PT)
D320
D321
D322
R309 6.8KΩ

① PT disk, photo transistor, light emitting diode
When the light from the light emitting diode passes through a slit in the PT disk, the photo-transistor is activated.


1
2
3
4
5
6
7
8
9
10
11
12
PTO


VC(+10V)
Light emitting diode
Photo-transistor
Ⓐ
Slit
PT disk
Slit
PT disk
10V
Ⓐ
0V

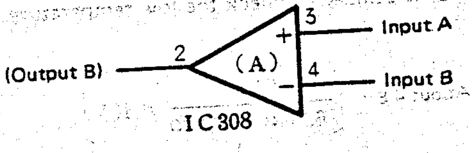
② IC305(A), PT lamp
With the on/off action of the photo-transistor, the output of the IC308(A) is changed.

(ON level)

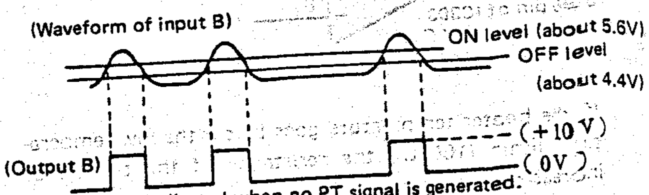
$$\text{About } 5.6\text{V} \left[\frac{100\text{K}\Omega}{100\text{K}\Omega + 80\text{K}\Omega} \times 10\text{V} \right]$$

(OFF level)

$$\text{About } 4.4\text{V} \left[\frac{80\text{K}\Omega}{100\text{K}\Omega + 80\text{K}\Omega} \times 10\text{V} \right]$$


3
+
Input A
2
(Output B)
(A)
4
−
Input B
IC308

Action of IC308(A)
Voltage of input A > voltage of input B-"H" output
Voltage of input A < voltage of input B-"L" output

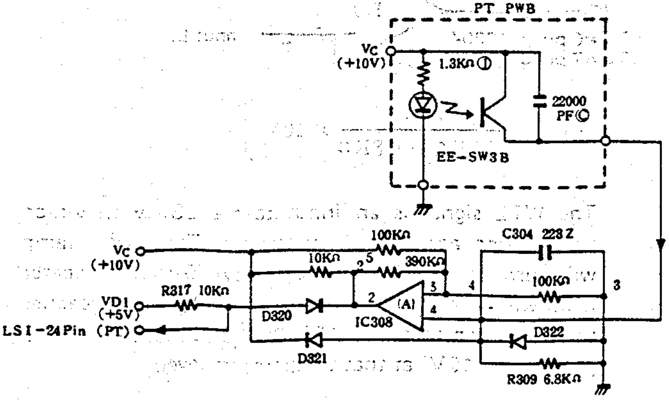

(Waveform of input B)
ON level (about 5.6V)
OFF level (about 4.4V)
(Output B)
(+10V)
(0V)

Status "L4" is indicated when no PT signal is generated.

Pin No.	Signal name	Function
32	GND	0V
33	S4	Strobe signal (switch sensing)
34	TFS	Table feed solenoid
35	S3	Strobe signal (switch sensing)
36	TRS	Table return solenoid
37	S2	Strobe signal (switch sensing)
38	DLR	Discharge lamp relay
39	S1	Strobe signal (switch sensing)
40	MMR	Main motor relay, active high (+5V)
41	BS	Bias signal
42	PFS	Paper feed solenoid, active high (+5V)
43	PSC	Paper stop clutch, active high (+5V)
44	BS2	Bias signal (−150V) with a low (0V) and −198V with a high (+5V).
45	ENI	Data transfer enable signal from the Memory LSI to the Main Control LSI, active high
46	$\overline{W1}$	Strobe signal
47	DT1	Data transfer signal from the Memory LSI to the Main Control LSI.
48	$\overline{W0}$	Strobe signal
49	7Sc	LED segment signal c
50	7Sb	LED segment signal b
51	7Sa	LED segment signal a
52	7Sg	LED segment signal g
53	7Se	LED segment signal e
54	7Sd	LED segment signal d
55	7Sf	LED segment signal f
56	TC	Total counter output signal
57	CLR	Copy lamp activating signal
58	MHV	Main high voltage signal, MHVG on (+5V).
59	MDL3	Display select signal
60	MDL2	Display select signal (second display digit)
61	MDL1	Display select signal (first display digit)
62	HL	Heater lamp on signal
63	RPL	Ready pilot lamp signal, active high (+5V)
64	VD1	Power supply (+5V)

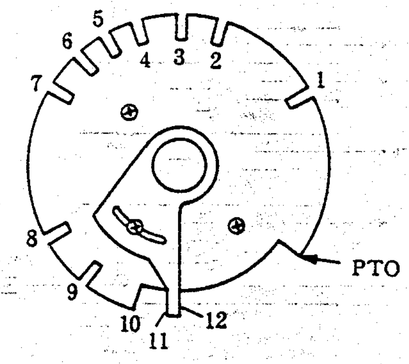
(2) PT signal generator

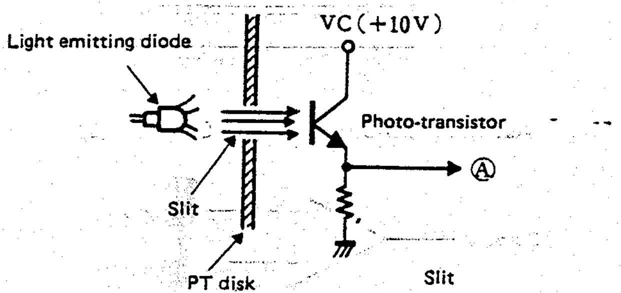
PT signal determines operational timing of each load.

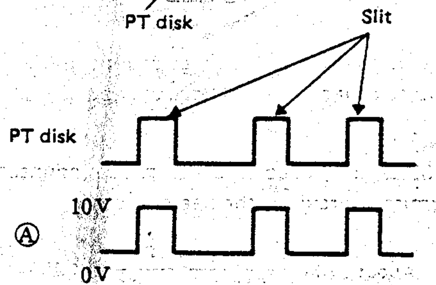

PT PWB
Vc (+10V)
1.3KΩ ①
22000 PF ©
EE-SW3B
Vc (+10V)
100KΩ
10KΩ
390KΩ
C304 223Z
100KΩ
R317 10KΩ
VD1 (+5V)
LSI-24Pin (PT)
D320
IC308
(A)
D321
D322
R309 6.8KΩ
2
3
4
5

① PT disk, photo transistor, light emitting diode

When the light from the light emitting diode passes through a slit in the PT disk, the photo-transistor is activated.


1
2
3
4
5
6
7
8
9
10
11
12
PTO


Light emitting diode
VC (+10V)
Photo-transistor
Ⓐ
Slit
PT disk



② IC305(A), PT lamp

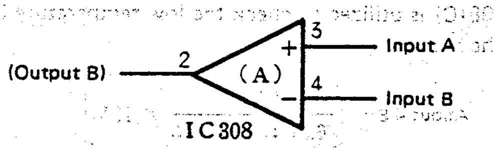
With the on/off action of the photo-transistor, the output of the IC308(A) is changed.

(ON level)

About 5.6V $\left[\dfrac{100\text{K}\Omega}{100\text{K}\Omega + 80\text{K}\Omega} \times 10\text{V}\right]$

(OFF level)

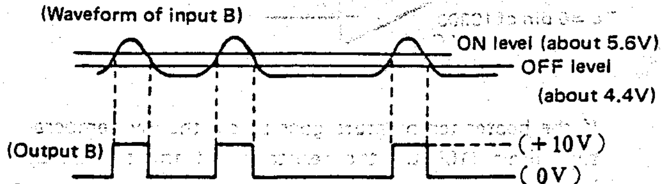
About 4.4V $\left[\dfrac{80\text{K}\Omega}{100\text{K}\Omega + 80\text{K}\Omega} \times 10\text{V}\right]$


(Output B)
2
3
4
+
−
(A)
Input A
Input B
IC308

Action of IC308(A)

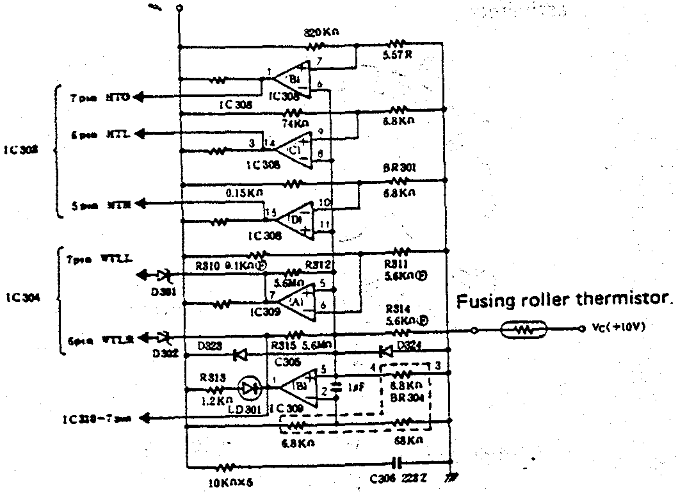
Voltage of input A > voltage of input B-"H" output

Voltage of input A < voltage of input B-"L" output

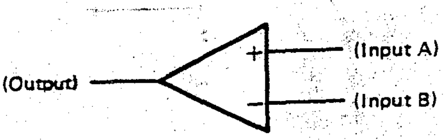


Status "L4" is indicated when no PT signal is generated.

(3) IC308(B), IC308(C), IC308(D), IC309(A), IC309(B)


Vc(+10V)
820KΩ
5.57R
7pin HTO
IC308
74KΩ
6.8KΩ
6pin HTL
BR301
0.15KΩ
5pin HTH
7pin WTLL
R310 9.1KΩ
R312
R311 5.6KΩ
5.6MΩ
D301
IC304
IC309
R314 5.6KΩ
6pin WTLR
D302
D323
R315 5.6MΩ
D324
C305
R313 1.2KΩ
LD301
1μF
6.8KΩ
BR304
IC310-7pin
68KΩ
10KΩ×5
C306 222Z
Fusing roller thermistor.
Vc(+10V)

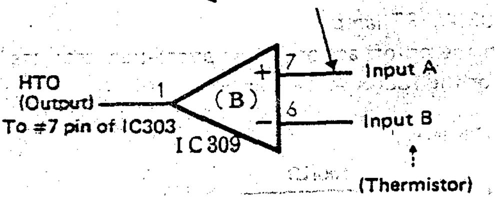
Action of IC308(B), (C), (D), IC309(A), (B)


(Output)
+
–
(Input A)
(Input B)

Voltage of input A > voltage of input B-"H" output
Voltage of input A < voltage of input B-"L" output

① IC308(B)
IC308(B) is utilized to check proper connection in the thermistor circuit of the heater section.

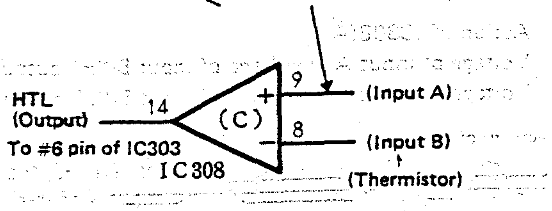
$$\text{About } 0.07\text{V} \left[\frac{5.57\text{K}\Omega}{5.57\text{K}\Omega + 820\text{K}\Omega} \times 10\text{V}\right]$$


HTO
(Output)
To #7 pin of IC303
1
(B)
IC309
7
6
Input A
Input B
(Thermistor)

If the thermistor is open, output goes high as #6 pin goes to 0V. In this case, the status "H2" is displayed.

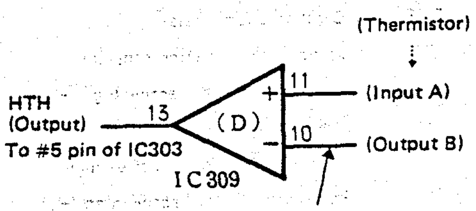
② IC308(B)
IC308(C) is utilized to check the low temperature limit of the heater section.

$$\text{About } 4.8\text{V} \left[\frac{6.8\text{K}\Omega}{6.8\text{K}\Omega + 7.4\text{K}\Omega} \times 10\text{V}\right]$$


HTL
(Output)
To #6 pin of IC303
14
(C)
IC308
9
8
(Input A)
(Input B)
(Thermistor)

If the heater temperature goes below the low temperature limit (160°C), the resistance of the thermistor increases and causes #9 pin input level to become greater than #8 pin and makes the output high (+10V) as a result, and will indicate the status "H4" on the display if the condition persists for more than four minutes.

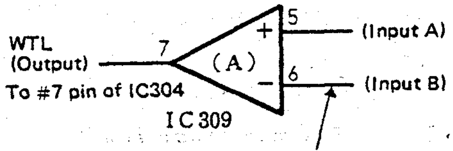
③ IC308(D)
IC308(D) is utilized to check the high temperature limit of the heater section.


(Thermistor)
HTH
(Output)
To #5 pin of IC303
13
(D)
IC309
11
10
(Input A)
(Output B)

$$\text{About } 5.25\text{V} \left[\frac{6.8\text{K}\Omega}{6.8\text{K}\Omega + 6.15\text{K}\Omega} \times 10\text{V}\right]$$

If the heater temperature goes above the high temperature limit (220°C), the resistance of the thermistor decreases and causes #11 pin to become greater than #10 pin and makes the output high (+10V) as a result, and will indicate the status "H3" on the display.

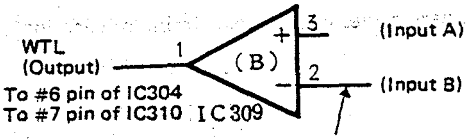
④ IC309(A)
IC309(A) is utilized to check if the heater temperature limit is within the predetermined level (130°C±5°C) during power down.


WTL
(Output)
To #7 pin of IC304
7
(A)
IC309
5
6
(Input A)
(Input B)

$$3.8\text{V} \left[\frac{5.6\text{K}\Omega}{9.1\text{K}\Omega + 5.6\text{K}\Omega} \times 10\text{V}\right]$$

The WTL signal is an input to the LSI, with which heater lamp actuation is controlled. The heater lamp will turn on when the WTL is low (0V). The heater lamp will go out when the heater temperature reaches the fusing temperature (130°C±5°C), because the WTL goes high (+10V) at that temperature level.

⑤ IC309(B)
IC309(B) is utilized to check if the heater temperature limit is within the predetermined level (180°C±5°C).

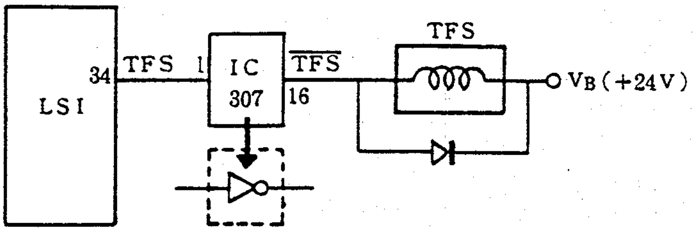

WTL
(Output)
To #6 pin of IC304
To #7 pin of IC310
1
(B)
IC309
3
2
(Input A)
(Input B)

$$5\text{V} \left[\frac{6.8\text{K}\Omega}{6.8\text{K}\Omega + 6.8\text{K}\Omega} \times 10\text{V}\right]$$

The WTL signal is an input to the LSI, with which heater lamp actuation is controlled. The heater lamp will turn on when the WTL is low (0V). The heater lamp will go out when the heater temperature reaches the fusing temperature (180°C±5°C), because the WTL goes high (+10V) at that temperature level.

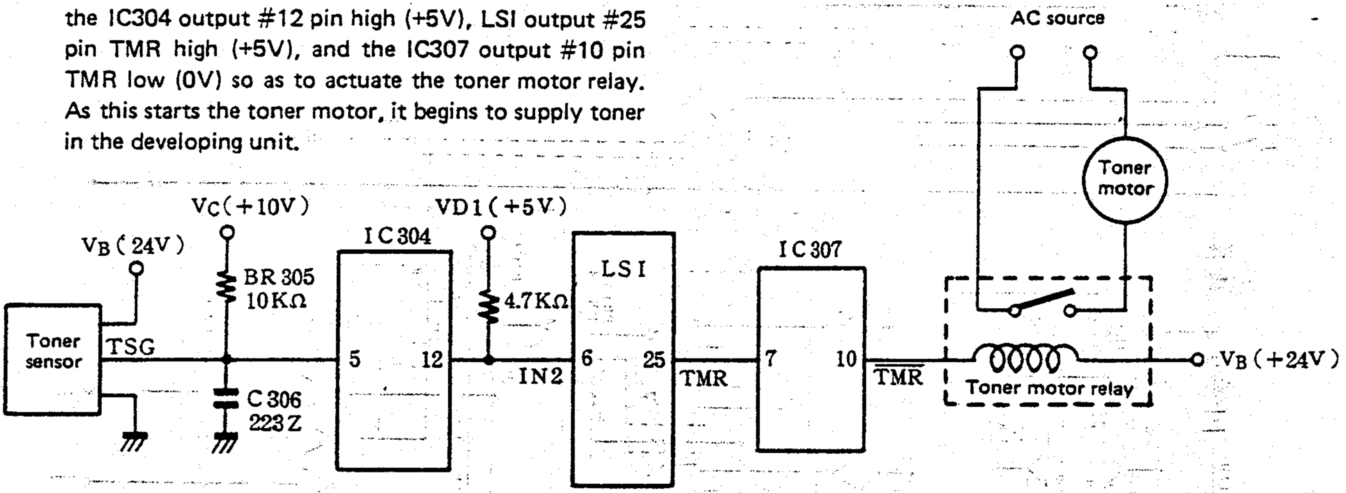
(4) Driver circuit

Signal outputs from the LSI are used to operate various functions through relevant driver IC's.
When the TFS signal of the LSI goes high (+5V), it makes the TFS signal inverted to low state (0V) on the output side of the IC, which causes the TFS to operate.


LSI
34
TFS
1
IC 307
$\overline{\text{TFS}}$
16
TFS
VB (+24V)

(5) Toner supply control circuit

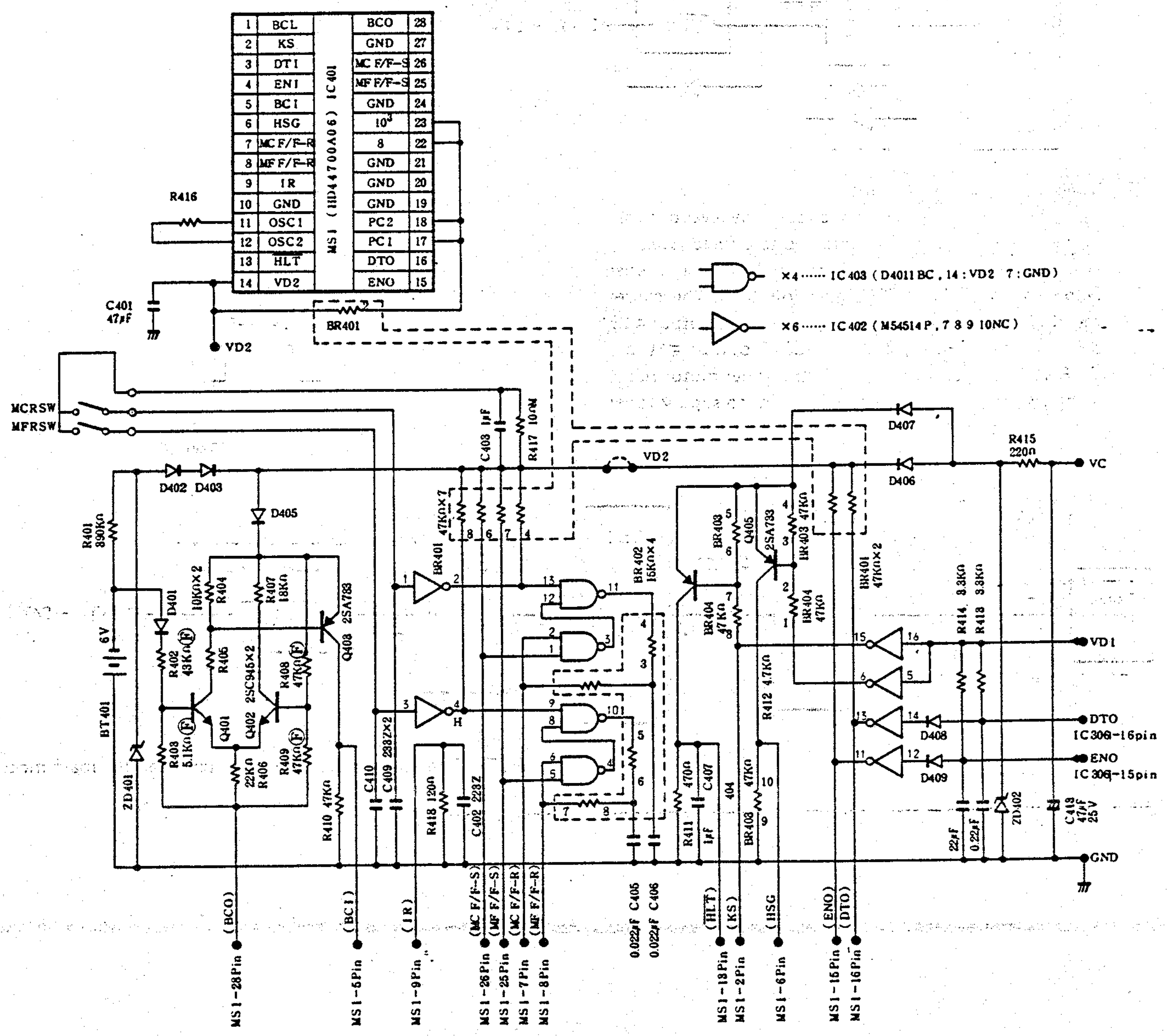
With the toner supply control circuit, the level of toner in the developing unit is maintained to a fixed level.
When the level of the toner in the developing unit goes below the lower limit, TSG goes low (0V). This causes the IC304 output #12 pin high (+5V), LSI output #25 pin TMR high (+5V), and the IC307 output #10 pin TMR low (0V) so as to actuate the toner motor relay. As this starts the toner motor, it begins to supply toner in the developing unit.


AC source
Toner motor
VB (24V)
Toner sensor
TSG
Vc(+10V)
BR 305 10KΩ
C 306 223Z
IC 304
5
12
VD1 (+5V)
4.7KΩ
IN2
LSI
6
25
TMR
IC 307
7
10
$\overline{\text{TMR}}$
Toner motor relay
VB (+24V)

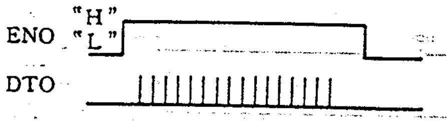
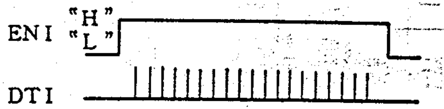
NOTE: The toner motor will not run when the main motor is not running.

4. Memory circuit (in the Main PWB)

The memory circuit is used to store the data received from the Main LSI and to transfer the data stored in the memory to the Main LSI.


MS1 (HD44700A06) IC401
1 BCL
2 KS
3 DTI
4 ENI
5 BCI
6 HSG
7 MC F/F-R
8 MF F/F-R
9 IR
10 GND
11 OSC1
12 OSC2
13 HLT
14 VD2
28 BCO
27 GND
26 MC F/F-S
25 MF F/F-S
24 GND
23 10³
22 8
21 GND
20 GND
19 GND
18 PC2
17 PC1
16 DTO
15 ENO
R416
C401 47μF
VD2
BR401
×4 …… IC403 (D4011BC, 14 : VD2 7 : GND)
×6 …… IC402 (M54514P, 7 8 9 10NC)
MCRSW
MFRSW
C403 1μF
R417 10MΩ
D402 D403
D405
R401 390KΩ
D401
R404 10KΩ×2
R407 18KΩ
Q403 2SA733
R402 43KΩ F
R405
R408 47KΩ F
Q401 Q402 2SC945×2
R403 5.1KΩ F
R406 22KΩ
R409 47KΩ F
R410 47KΩ
6V
BT401
ZD401
BR401 47KΩ×7
BR402 15KΩ×4
C410
C409 2322×2
R418 120Ω
C402 2222
H
C405 0.022μF
C406 0.022μF
VD2
D407
D406
R415 220Ω
VC
BR403
Q405 2SA733
BR403 47KΩ
BR404 47KΩ
BR401 47KΩ×2
R412 4.7KΩ
R414 3.3KΩ
R413 3.3KΩ
VD1
DTO IC306-16pin
ENO IC306-15pin
D408
D409
R411 470Ω
C407 1μF
BR403 47KΩ
22μF
0.22μF
ZD402
C413 47μF 25V
GND
(BCO) MS1-28Pin
(BCI) MS1-5Pin
(IR) MS1-9Pin
(MC F/F-S) MS1-26Pin
(MF F/F-S) MS1-25Pin
(MC F/F-R) MS1-7Pin
(MF F/F-R) MS1-8Pin
(HLT) MS1-13Pin
(KS) MS1-2Pin
(HSG) MS1-6Pin
(ENO) MS1-15Pin
(DTO) MS1-16Pin

(1) Signal descriptions

Signal name	Function
ENO	Data transfer enable signal from the main LSI to the memory LSI, active high.
DTO	Counter contents and status transfer signal from the main LSI to the memory LSI. 
ENI	Data transfer enable signal from the memory LSI to the main LSI, active high.
DTI	Counter contents and status transfer signal from the memory LSI to the main LSI. 
BCL	Battery check signal. When the battery power goes below 4.6V, it makes the BCL high and the status "U1" is displayed.
HSG	This signal informs the memory LSI if the power (VD1) is on or off. (+5V is on VD1 when high)
KS	This signal turns low while a data transfer is made between the main LSI and the memory LSI. It prohibits data transfer when the signal is high.
HLT	A high on this line causes the memory LSI to hold the memory contents and disables any data transfer with the main LSI.
MF F/F-R	Misfeed reset signal. Actuation of the MFRSW causes the MF F/F-R signal high and cancels the paper misfeed condition.
MF F/F-S	This signal goes high (+5V) when paper misfeed occurs and sets the MF F/F.
MC F/F-R	This signal is used to clear the master counter of the memory LSI to zero. When the MCRSW is actuated, it makes the MC F/F-R signal high to reset the master counter.
MC F/F-S	This signal goes high (+5V) when the contents of the master counter reaches 8,000 and sets the MC F/F.
BCI	This signal is used to check low battery power supply. When the battery power drops below 4.6V makes the BCI low. The memory LSI acts to check battery power only when the BCO is low, and if battery power is found low, the status "U1" will displayed.
BCO	This signal is utilized to increment the copy counter. In order to save consumption of the battery power, it turns to low level only when the copy is increasing.
BT401	Battery power output. Normally at 5.5V to 6.

(2) Cautions when handling the Memory PWB

The battery is located on the Memory PWB, note the following when servicing.

① Never wrap the Memory PWB with an electrically conductive item such as aluminium foil, because it will short the battery terminals and destory the batteries.

② Do not place the Main PWB directly on a metal workbench.

③ Do not short the battery contacts.

(3) Memory backup battery replacement procedure

When the memory backup battery power goes below 4.6V, a "U1" will be displayed. The following procedure is required to replace the battery and to reset the status "U1".

① Before replacing the battery replacement, execute test commands 17 (master preset counter), 18 (total counter), and 19 (maintenance preset counter), and note the meter reading.

② Solder the new battery into the replacement battery position on the Main PWB.

③ Remove the old battery from the Main PWB.

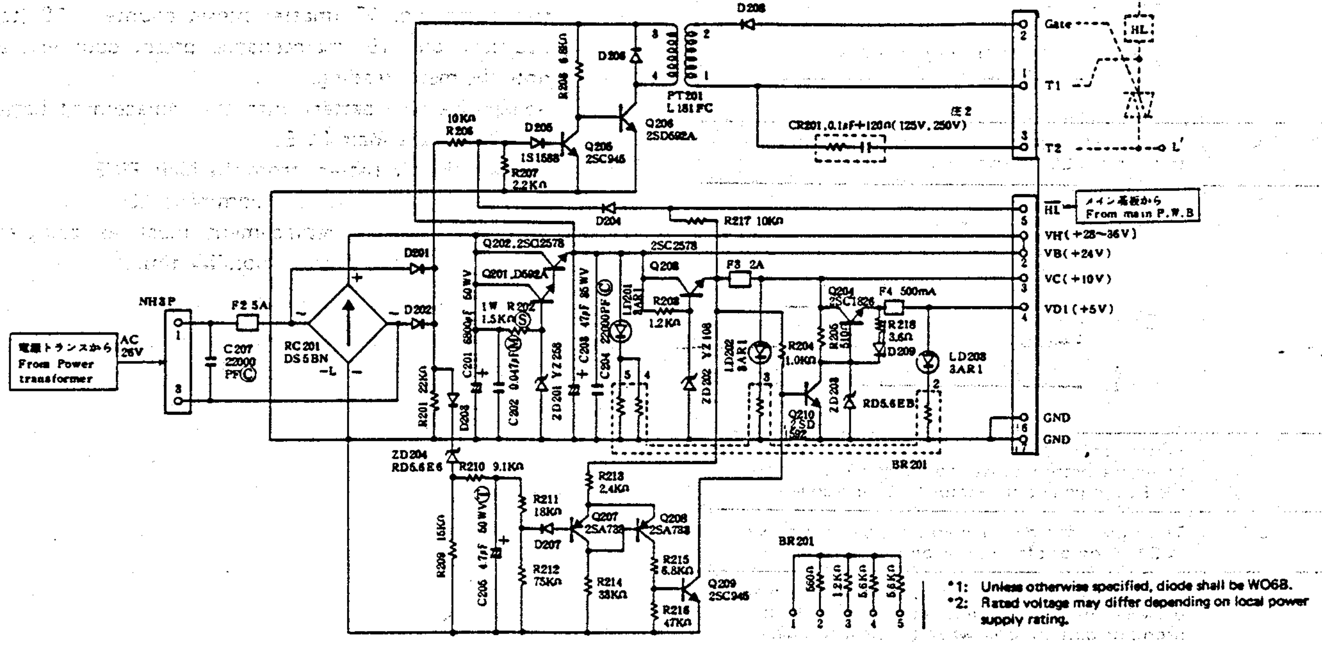
④ Clear status "U1" with test command 13.

IMPORTANT: Battery replacement must be completed in the shortest possible time.

5. DC power supply circuit

(1) Power supply

The DC power supply circuit develops the voltages necessary to operate components such as relays, Lsi's, and IC's.

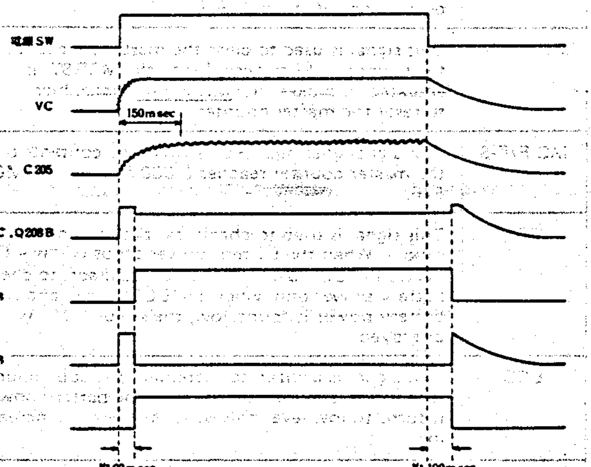

電源トランスから From Power transformer
AC 26V
NH3P
F2 5A
C207 22000 PF©
RC201 DS5BN -L
D201
D202
Q202 2SD2578
Q201 D592A
1W R202 1.5KΩ
C201 6800μF 50WV
C202 0.047μF
ZD201 YZ258
C203 47μF 35WV
C204 22000PF
LD201 3AR1
2SC2578
Q203
R203 1.2KΩ
F3 2A
ZD202 YZ108
LD202 3AR1
R204 1.0KΩ
Q204 2SC1826
F4 500mA
R218 3.6Ω
D209
LD203 3AR1
RD5.6EB
Q210 2SD592
ZD203
R201 22KΩ
D203
ZD204 RD5.6E6
R210 9.1KΩ
R209 15KΩ
C205 47μF 50WV
R211 18KΩ
D207
R212 75KΩ
R213 2.4KΩ
Q207 2SA733
Q208 2SA733
R214 33KΩ
R215 6.8KΩ
R216 47KΩ
Q209 2SC945
BR201
10KΩ R206
D205
1S1588
R207 2.2KΩ
Q205 2SC945
R208 6.8KΩ
D206
PT201 L181FC
Q206 2SD592A
D208
CR201, 0.1μF+120Ω(125V, 250V)
D204
R217 10KΩ
Gate
HL
T1
T2
N'
L'
メイン基板から From main P.W.B
VH(+28~36V)
VB(+24V)
VC(+10V)
VD1(+5V)
GND
GND
560Ω
12KΩ
5.6KΩ
5.6KΩ
1 2 3 4 5

*1: Unless otherwise specified, diode shall be WO6B.
*2: Rated voltage may differ depending on local power supply rating.

① VB (+24V) circuit
The +24V source supplies power to the magnetic clutchs (PSC), solenoids (TFS, TRS, PFS), and relays (PR, TMR, MMR, DLR).

② VC (+10V) circuit
The +10V source supplies power to the PT signal generator circuit, heat roller temperature sensor circuit, etc.

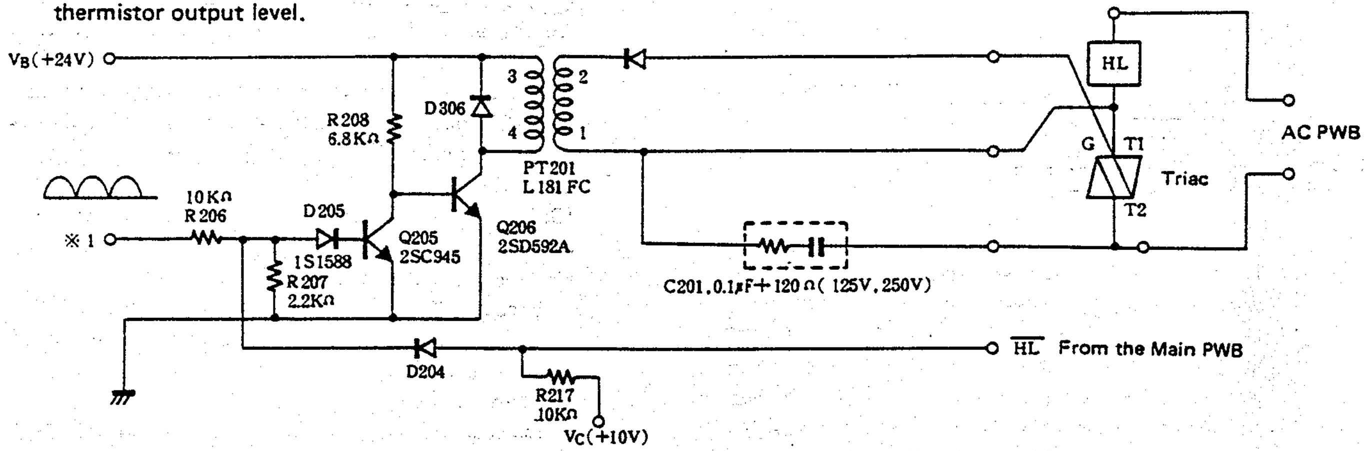
③ VD1 (+5V) circuit
Voltage from VD1 is used for LSI's and IC's. As waveforms of such as VC are not properly shaped upon power on, it may cause to deform the waveform at the rising edge of VD1, because VD1 is derioed from VC. Since it cannot expect proper performance of LSI and IC with such an improperly shaped waveform, a delay is applied by the C205/R210 network so that VD1 should not be put into supply after a full stabilization of VC power. In addition, the waveform at the rising edge is also shaped by the circuit.
In the same manner, the waveform is also shaped for the falling edge of VD1 at power off to set hysteresis by Q207 and Q208 in order to maintain VD1 even at the time of an instantaneous power failure.

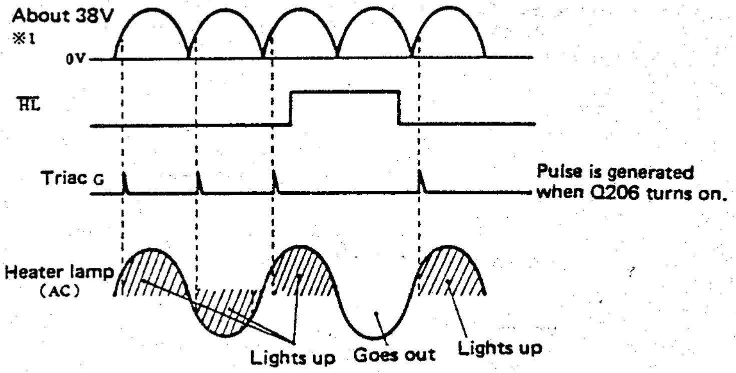


④ VH1 (28V~36V)
VH1 is used for the power supply to the high voltage transformer via the heater lamp thermal fuse (HLTF) and the copy lamp thermal fuse.

(2) Heater control circuit

The heater control circuit is used to maintain the heater temperature at a fixed level by controlling the actuation of the heater lamp, according to the thermistor output level.

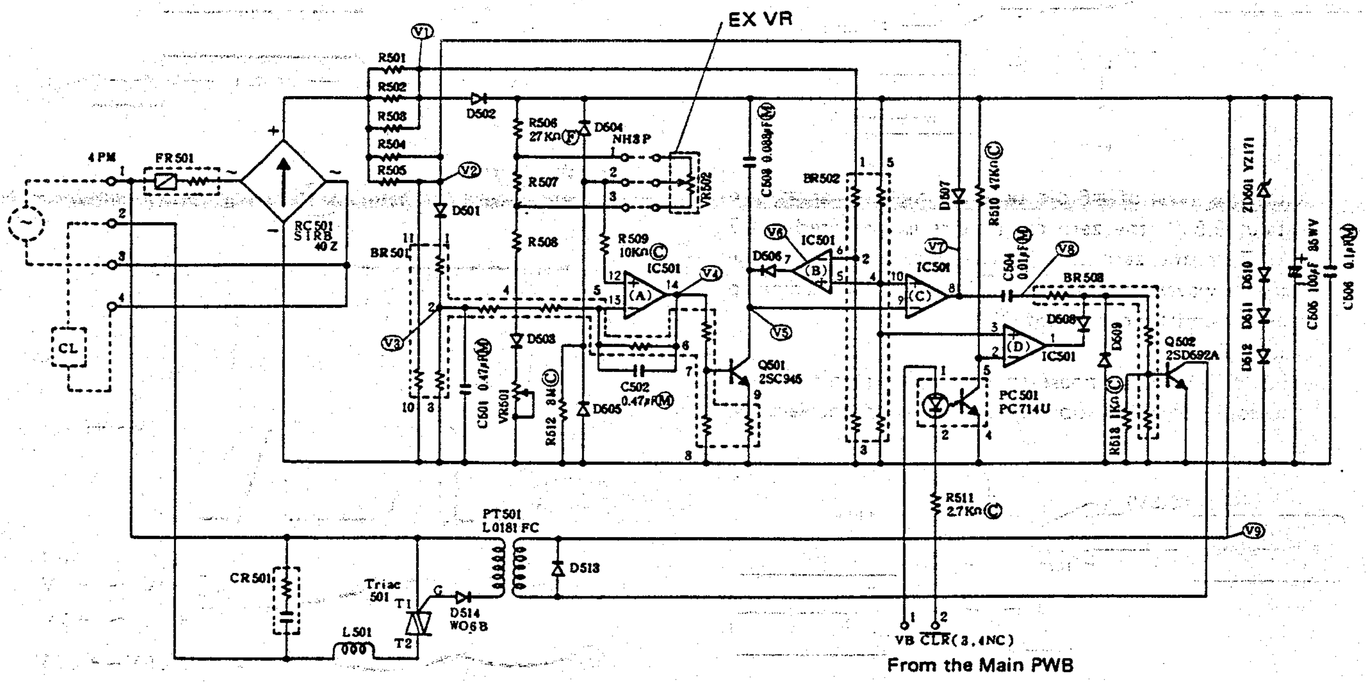

VB(+24V)
R208
6.8KΩ
D306
3
4
2
1
PT201
L181FC
10KΩ
R206
※1
D205
1S1588
R207
2.2KΩ
Q205
2SC945
Q206
2SD592A
D204
R217
10KΩ
Vc(+10V)
HL
G
T1
T2
Triac
AC PWB
C201, 0.1μF+120Ω (125V, 250V)
HL From the Main PWB


About 38V
※1
0V
HL
Triac G
Pulse is generated when Q206 turns on.
Heater lamp (AC)
Lights up
Goes out
Lights up

CAUTION: It does not cause to turn HL low while the copy lamp is on.

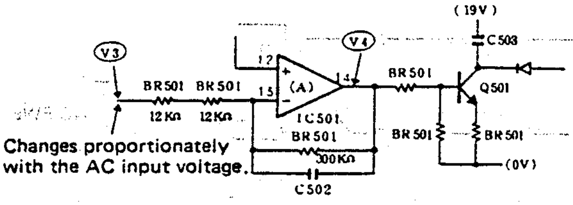
6. CL Reg circuit

The CL Reg circuit is employed to maintain the copy lamp intensity at a fixed level.


EX VR
V1
V2
V3
V4
V5
V6
V7
V8
V9
R501
R502
R503
R504
R505
4PM
FR501
RC501
STRB
40Z
D502
D501
R506 27KΩ(F)
D504
NH3P
R507
R508
R509 10KΩ(C)
VR502
C503 0.033μF(M)
BR501
BR502
BR503
IC501
D503
D505
D506
D507
D508
D509
C501 0.47μF(M)
VR501
R512 3M(C)
C502 0.47μF(M)
Q501 2SC945
R510 47KΩ(C)
C504 0.01μF(M)
PC501
PC714U
Q502
2SD592A
R513 1KΩ(C)
ZD501 YZ171
D510
D511
D512
C505 100μF 35WV
C506 0.1μF(M)
R511 2.7KΩ(C)
CL
PT501
L0181FC
D513
CR501
Triac 501
T1
T2
G
D514
WO6B
L501
VB CLR (3, 4NC)
From the Main PWB

(1) IC501(A)

IC501(A) is the inversion amplifier which increases the level difference between #12 pin and #13 pin.


(19V)
C503
V3
V4
BR501 BR501
12Kn 12Kn
12
13
(A)
14
BR501
Q501
IC501
BR501
BR501
BR501
300Kn
(0V)
C502

Changes proportionately with the AC input voltage.

① When the AC input voltage decreases

Drop in the V3 level causes the level difference between #12 pin and #13 pin to become greater and increases the V4 level, thus causing more current flow between the base and emitter of Q501, so that the current charged in the capacitor C503 is released faster. This causes the phase angle of the active portion of the power supplied to the copy lamp near to 0 degree to maintain the root mean square value potential added to the copy lamp even for maintaining the light intensity constant.

② When the AC voltage increases

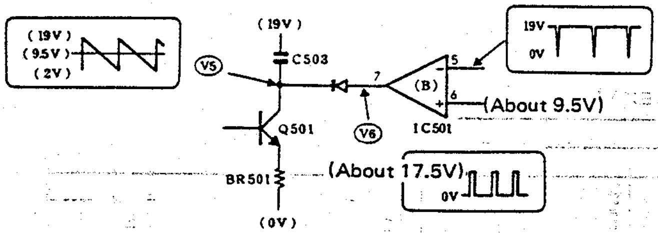
This causes the phase angle of the active portion of the power supplied to the copy lamp away from 0 degree to maintain the root mean square value potential decreased to the copy lamp even for maintaining the light intensity constant.

(2) IC501(B), (C), (D)

IC501(B), (C), (D) are used for the comparators.

① IC501(B)

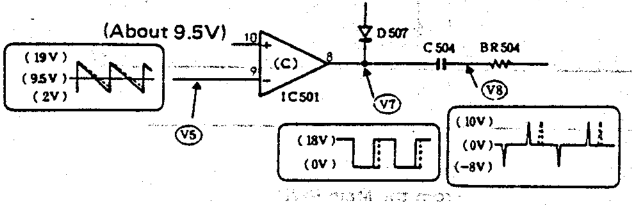
The IC501(B) is used to create the zero cross pulse.


(19V)
(9.5V)
(2V)
V5
(19V)
C503
7
5
6
(B)
19V
0V
(About 9.5V)
Q501
V6
IC501
BR501
(About 17.5V)
0V
(0V)

When the level of #6 pin becomes higher than #5 pin (about 9.5V), the zero cross pulse is generated at #7 pin. Then the zero cross pulse charges C503 and the triangle wavevorm at point V5 will vary according to the base-emitter current of Q501.

② IC501(C)

With IC501(C) the phase angle is determined by which the copy lamp will operate according to the level of V5


(About 9.5V)
(19V)
(9.5V)
(2V)
10
9
(C)
8
IC501
D507
C504
BR504
V7
V8
V5
(18V)
(0V)
(10V)
(0V)
(-8V)

Should there be less current supplied between the base and the emitter of Q501, it causes a delay in the discharge time of C503 so that the triangle waveform of V5 dislocated to the point indicated by the dotted line, which functions to determine the rising points of V7 and V8 by which the phase angle is determined for the actuating point of the power supplied to the copy lamp.

This dislocation, however, may vary depending upon the AC input voltage to the #13 pin of the IC501(A) and the exposure control voltage of the #12 pin.

③ IC501(D)

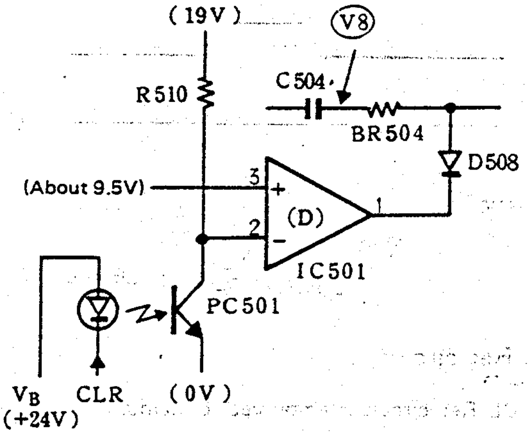
IC501(D) may be considered a switch which determines actuation of the copy lamp.

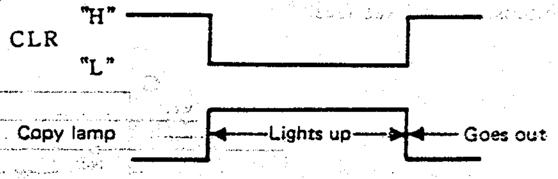
a) When the CLR signal is high

Because PC501 is inactive, #1 pin of the IC501(D) is at a low level. This generates no pulse keeping the copy lamp off.

b) When the CLR signal is low

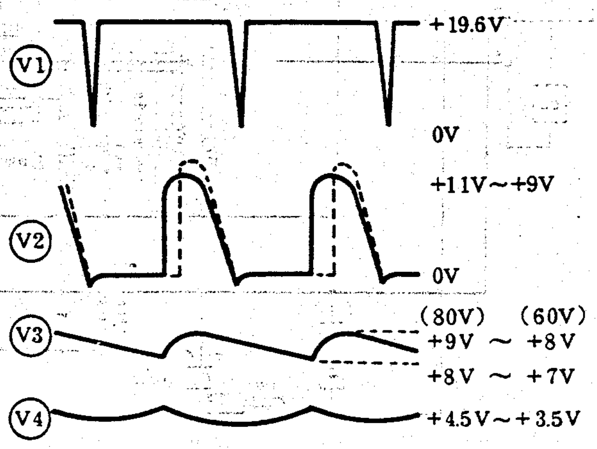
Because PC501 is active, #1 pin of the IC501(D) is at a high level. This makes the pulse obtained at V8 turn on Q502, so as to actuate the copy lamp.

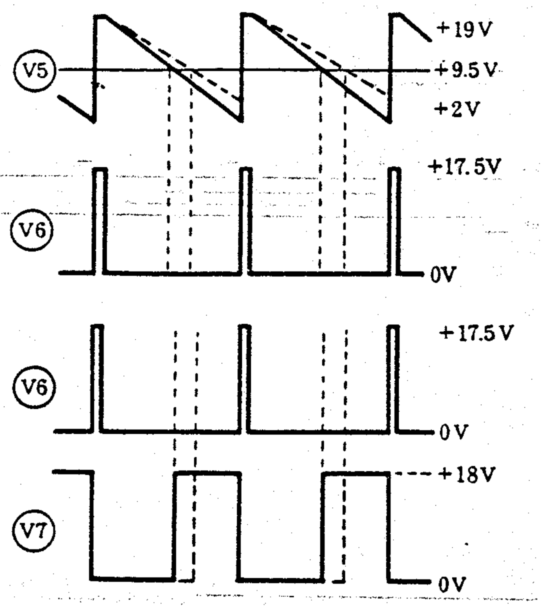

(19V)
V8
R510
C504
BR504
D508
(About 9.5V)
3
2
1
(D)
IC501
PC501
VB
(+24V)
CLR
(0V)

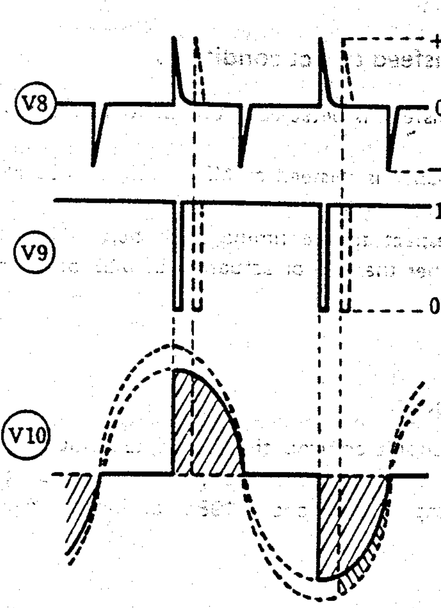

CLR
"H"
"L"
Copy lamp
Lights up
Goes out

(3) Waveforms

Waveforms, V1 thru V10, are as shown below.

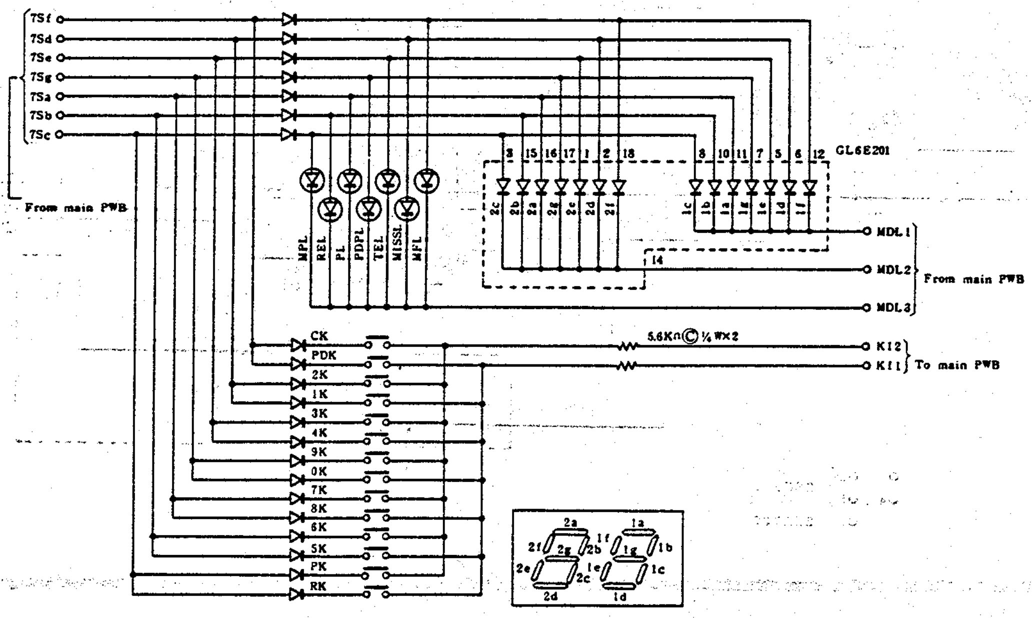


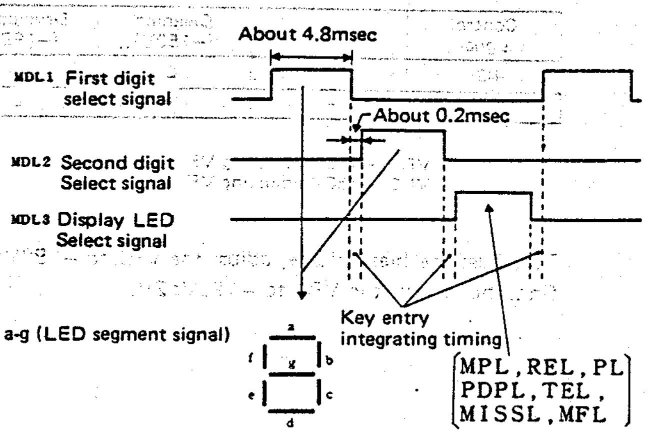

V5
+19V
+9.5V
+2V
V6
+17.5V
0V
V6
+17.5V
0V
V7
+18V
0V


+10V
V8
0V
-8V
V9
19V
0V
V10

7. Display circuit

This circuit is used to display key entry data.


7Sf
7Sd
7Se
7Sg
7Sa
7Sb
7Sc
From main PWB
MPL
REL
PL
PDPL
TEL
MISSL
MFL
GL6E201
3
15
16
17
1
2
18
8
10
11
7
5
6
12
14
2c
2b
2a
2g
2e
2d
2f
1c
1b
1a
1g
1e
1d
1f
MDL1
MDL2
MDL3
From main PWB
5.6KΩ ¼W×2
K12
K11
To main PWB
CK
PDK
2K
1K
3K
4K
9K
0K
7K
8K
6K
5K
PK
RK
2a
1a
2f
2g
2b
1f
1g
1b
2e
2c
1e
1c
2d
1d


About 4.8msec
MDL1 First digit select signal
About 0.2msec
MDL2 Second digit Select signal
MDL3 Display LED Select signal
Key entry integrating timing
a-g (LED segment signal)
a
b
c
d
e
f
g
MPL, REL, PL
PDPL, TEL,
MISSL, MFL

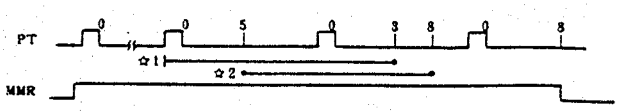
K11 and K12 are key-input signals, which will check key entry within a period of 0.2msec.

8. Paper misfeed detect conditions

A paper misfeed is detected if one of following conditions occur:

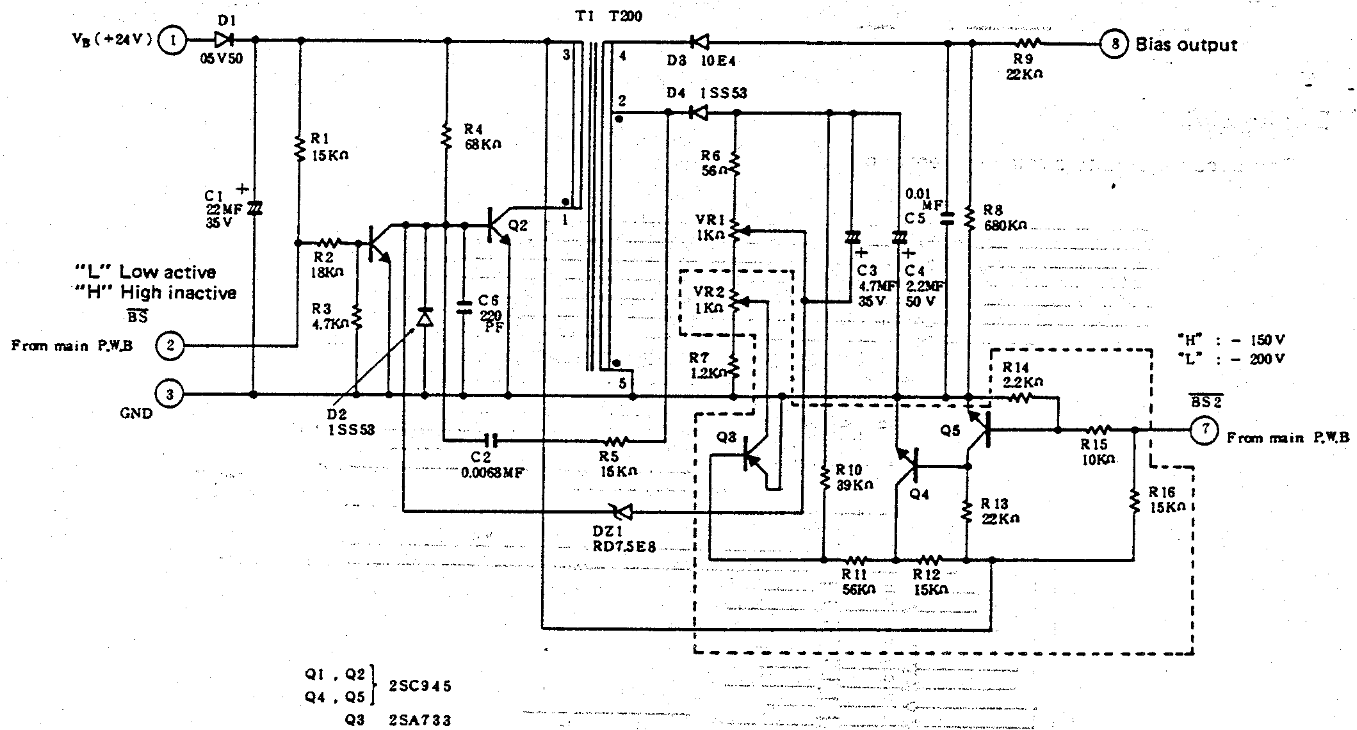
1. When paper is misfeed at MS1, MS2, or MS3 at power on.
2. With respect to the timing chart below; actuation of MS2 other that *1, or actuation of MS3 other than *2.

Timing chart



9. Bias circuit

The bias circuit controls the bias voltage supplied to the developing unit. −150V of bias potential is supplied during the cleaning process and −198V during the developing process.


V_B (+24V) ①
D1
05V50
T1 T200
D3 10E4
D4 1SS53
⑧ Bias output
R9
22KΩ
R1
15KΩ
R4
68KΩ
C1
22MF
35V
Q2
R6
56Ω
VR1
1KΩ
0.01 MF
C5
R8
680KΩ
"L" Low active
"H" High inactive
BS
R2
18KΩ
R3
4.7KΩ
C6
220 PF
VR2
1KΩ
C3
4.7MF
35V
C4
2.2MF
50 V
From main P.W.B ②
"H" : − 150V
"L" : − 200V
R7
1.2KΩ
R14
2.2KΩ
BS2
GND ③
D2
1SS53
Q3
Q5
⑦ From main P.W.B
C2
0.0068MF
R5
15KΩ
R10
39KΩ
Q4
R15
10KΩ
R13
22KΩ
R16
15KΩ
DZ1
RD7.5E8
R11
56KΩ
R12
15KΩ
1
2
3
4
5
Q1, Q2
Q4, Q5 2SC945
Q3 2SA733

The bias output is 0V when the bias control signal BS is high (+5V).
When the bias control signal BS is low (0V), the bias output voltage of −150V is supplied to the developing unit during the cleaning process and −198V during the developing process. Change of −150V to −198V is done by BS2.

Control signal	0V	Cleaning (−150V)	Developing (−198V)
BS	H	L	L
BS2	—	H	L

VR1: −198V adjusting VR
VR2: −150V adjusting VR

To adjust the bias voltage, adjust the VR2 to −150V±1.5V first, then adjust the VR1 to −198V±2V.

Comparison of SF-755 specifications with those of SF-750

	Description	SF-755	SF-750
Specification	(1) Copy speed	10 copies/min (all sizes)	10 copies/min (all sizes)
	(2) First copy	7.5 sec	7.5 sec
	(3) Paper empty display feature	No	No
	(4) Power save feature	During standby in the power save mode (135W) During standby (180W)	No During standby (180W)
	(5) Library card copy	Yes	No
	(6) Manual feed mode display feature	Yes	No
Paper feed system	(1) Paper empty sensor switch	No	No
	(2) Manual paper registration sensor switch	Shared use of MS1 (cassette paper registration sensor switch)	MS4 (manual paper registration sensor actuator at two locations)
	(3) Manual feed error	No	No
	(4) Manual feed table	Shared use of the cassette cover	Special table
	(1) High voltage transformers		
	a. Main corona high voltage transformer (MHVG) DCD sheet current	RTRNZ0231FCZZ −6.20kV 620μA 30±0.5μA Tolerance of 1.0μA between front and rear frame sides (Difference not adjustable)	RTRNZ0189FCZZ −6.5kV 820μA 30±0.5μA Tolerance of 0.5μA between front and rear frame sides
	b. Transfer corona high voltage transformer (THVG) DCD sheet current	RTRNZ0249FCZZ (100V Series) RTRNZ0240FCZZ (200V Series) −7.0KV 330μA 22±4μA Tolerance of 4.0μA between front and rear frame sides	RTRNZ0210FCZZ +7.0kV 600μA 25±4μA Tolerance of 4.0μA between front and rear frame sides
	c. Discharge corona high voltage transformer (DHVG) DCD sheet current	RTRNZ0250FCZZ (100V Series) RTRNZ0241FCZZ (200V Series) +5.5KV 180μA 10±2μA Tolerance of 4.0μA between front and rear frame sides	RTRNZ0211FCZZ +7.0kV 600μA 12±0.5μA Tolerance of 2.0μA between front and rear frame sides
	(2) Corona units a. Main corona unit	CCASZ0079FC51 (No current balancing feature)	CCASZ0052FC55
	b. Transfer corona unit	CCASZ0080FC52	CCASZ0053FC51
	c. Discharge corona unit	CCASZ0081FC52	CCASZ0054FC51

	Description	SF-755	SF-750
Optical system	(1) Use of a cyan filter to improve reproductivity for red color.	Yes	No
	(2) Auxiliary reflector	Single unit	Two units
	(3) Reflector	Buff polished	No buff finish
	(4) Copy lamp	6φ diameter RLMPU0191FCZZ (100V Series) RLMPU0192FCZZ (200V Series)	8φ diameter (RLMPU0140FCZZ)
	(5) Optical unit	CREFL0056FC52 (200V Series) CREFL0056FC53 (100V Series) CREFL0056FC54 (USA. CANADA only)	CREFL0048FC31
	(6) Off center	0mm	4mm
	Center deviation	±2mm	±2mm
	(7) Void area Image loss	Tolerance for void area and image loss Void area A Max. 10mm Min. 6mm B Max. 4mm Min. 1mm Image loss a Max. 12mm Min. 6mm b Max. 2.5mm	Tolerance for void area and image loss Void area A Max. 10mm Min. 6mm B Max. 4mm Min. 1mm Image loss a Max. 8mm Min. 0mm b Max. 2.5mm
Developing section	(1) Bias voltage	During cleaning: −150V During developing: −198V	During cleaning: −200V During developing: −200V
	(2) Accessing of the developing unit	Accessing from the front frame side is not fixed	Accessing from the front frame side is fixed
	(3) Toner sensor		
	(4) Toner	Not compatible with the toner used for SF-750	Not compatible with the toner used for SF-755
	(5) Developer	Not compatible with the toner used for SF-750	Not compatible with the toner used for SF-755
Fusing section	(1) Unitization of the fusing section	Unitized	Not unitized
	(2) Lower heat roller	Compatible with that used for the SF-750 NROLi0232FCZZ	Compatible with that used for the SF-755 NROLi0232FCZZ
	(3) Silicone oil	Oil cartridge	Silicone wick
Drum section	(1) Unit	Not compatible with those used for the SF-750 Wider drum area than SF-750 Three pieces of hooks used to hold the master trailing edge	Not compatible with that used for the SF-755 Two pieces of hooks used to hold the master trailing edge
Others	(1) MS5, MS6, MS7	Microswitch	Reed switch
	(2) Ventilation fan motor —	No	Yes
	(3) Self-diagnostic function "C2" (THVG trouble)	Yes	No
	(4) Aging function of test program 21, 22, 23	No	Yes
	(5) Discharge lamp unit	Not compatibility with those used for the SF-750	Not compatible with those used for the SF-755
	(6) Separator unit	Remover sheet method	Separator roller method
	(7) Master	Not compatible with those used for the SF-750, because the master used for the SF-755 has wider size, with change in leading edge holding hole positions.	Not compatible with those used for the SF-755
	(8) Memory backup battery	One piece	Two pieces

·XXD 26

CODE:00ZSF755C/C-M

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SHARP

SF-755 回路図集
SF-755 CIRCUIT DIAGRAM

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SHARP CORPORATION

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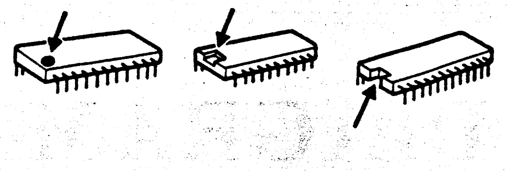
〔1〕注意事項

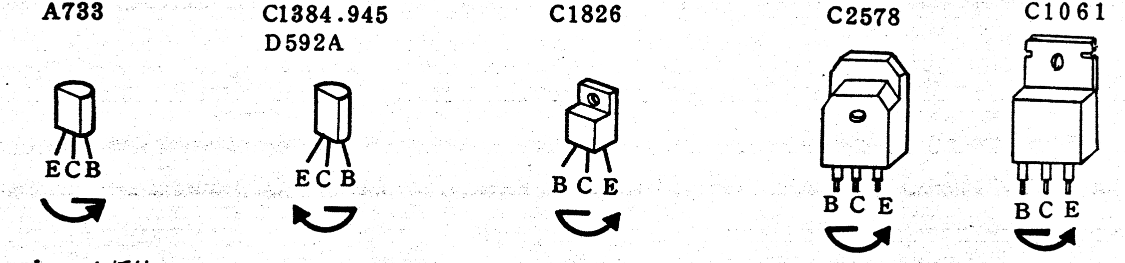
1. 部品の形状と挿入方向

(1) LSI，IC

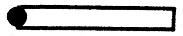
●印のある方はLSI，ICの上部が欠けている方向です。



(2) Tr（トランジスター）

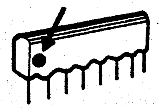

A733
ECB
C1384.945
D592A
ECB
C1826
BCE
C2578
BCE
C1061
BCE

(3) ブロック抵抗

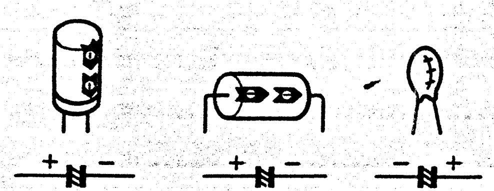


●印のある方を部品の●印を合わせて挿入

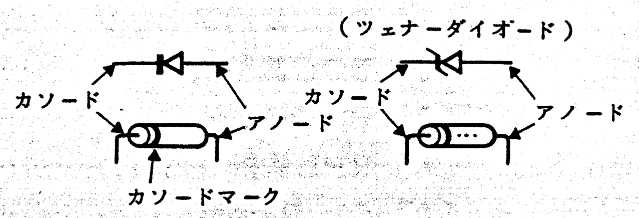
（●印なき物は挿入方向指定無）



(4) 電解コンデンサー



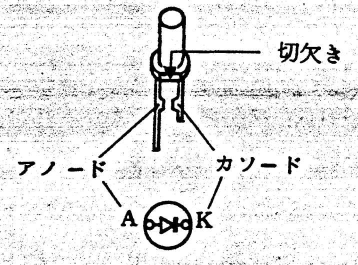
(5) ダイオード


（ツェナーダイオード）
カソード
アノード
カソードマーク
カソード
アノード

回路図に指定なきダイオードはDS1588L2である。

(6) 発光ダイオード

（GL3AR1）


切欠き
アノード
カソード
A
K

(7) その他留意事項

① 抵抗の材質と誤容誤差

（例） 20KΩ ⊗
Ⓕ……± 1％（金属皮膜抵抗）
Ⓙ……± 5％（酸化金属皮膜抵抗）
Ⓚ……±10％（ソリッド抵抗）

尚回路図に指定なきワット数は¼Wである。

② コンデンサー

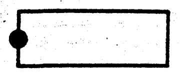
（例） 22000PF ⊗
Ⓐ……アルミ電解コンデンサー
Ⓣ……タンタル電解コンデンサー
Ⓜ……マイラーコンデンサー
ⓒ……セラミックコンデンサー
ⓣ……温度補償あり

安全性・信頼性確保のため部品は、必ず正規のものをご使用下さい。
⚠印ならびに網目の部品は、安全性および保安性能維持のため、特に重要な部品です。
交換の時は、必ず指定された品番のものを使用して下さい。

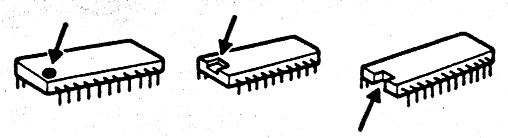
〔1〕NOTES

1. Shape and installation direction for the parts.

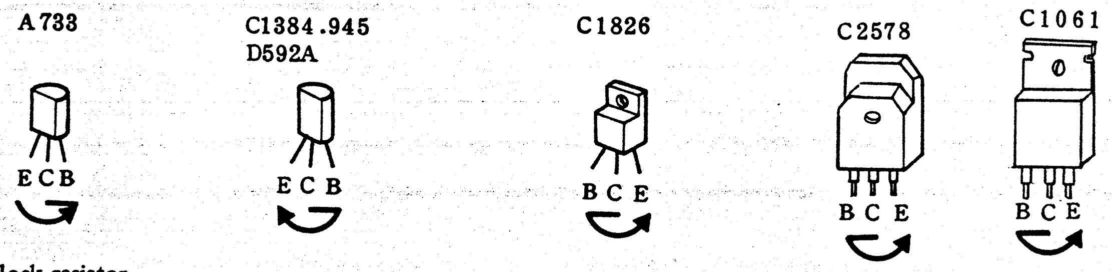
(1) LSI, IC, identification marks.



● Mark shows installation position for LSI, IC

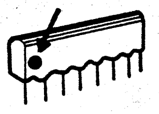


(2) Tr (Transistor)


A733
ECB
C1384.945
D592A
ECB
C1826
BCE
C2578
BCE
C1061
BCE

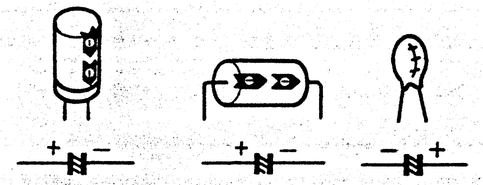
(3) Block resistor

● Mark shows installation position for block resistor.

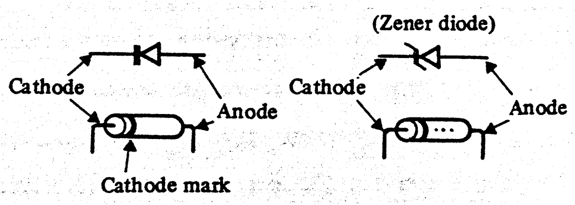


(Block resistor without symbol can be installed in either direction.)

(4) Electrolytic capacitor

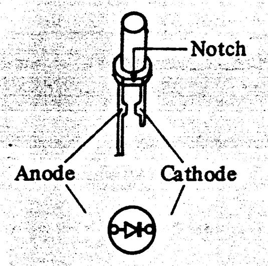


(5) Diode


(Zener diode)
Cathode
Anode
Cathode mark
Cathode
Anode

DS 1588L2 is used for the diodes without indication on the circuit diagram.

(6) Light emitting diode


Notch
Anode
Cathode

(7) Instruction for the circuit diagram.

① Limited allowance and Material for the resistor

20kΩ ⊗
Ⓕ. . .±1% (Metal composition resistor)
Ⓙ. . .±5% (Metal oxide composition resistor)
Ⓚ. . .±10% (Carbon composition resistor)

No indication resistor is used 1/4W solid type resistor.

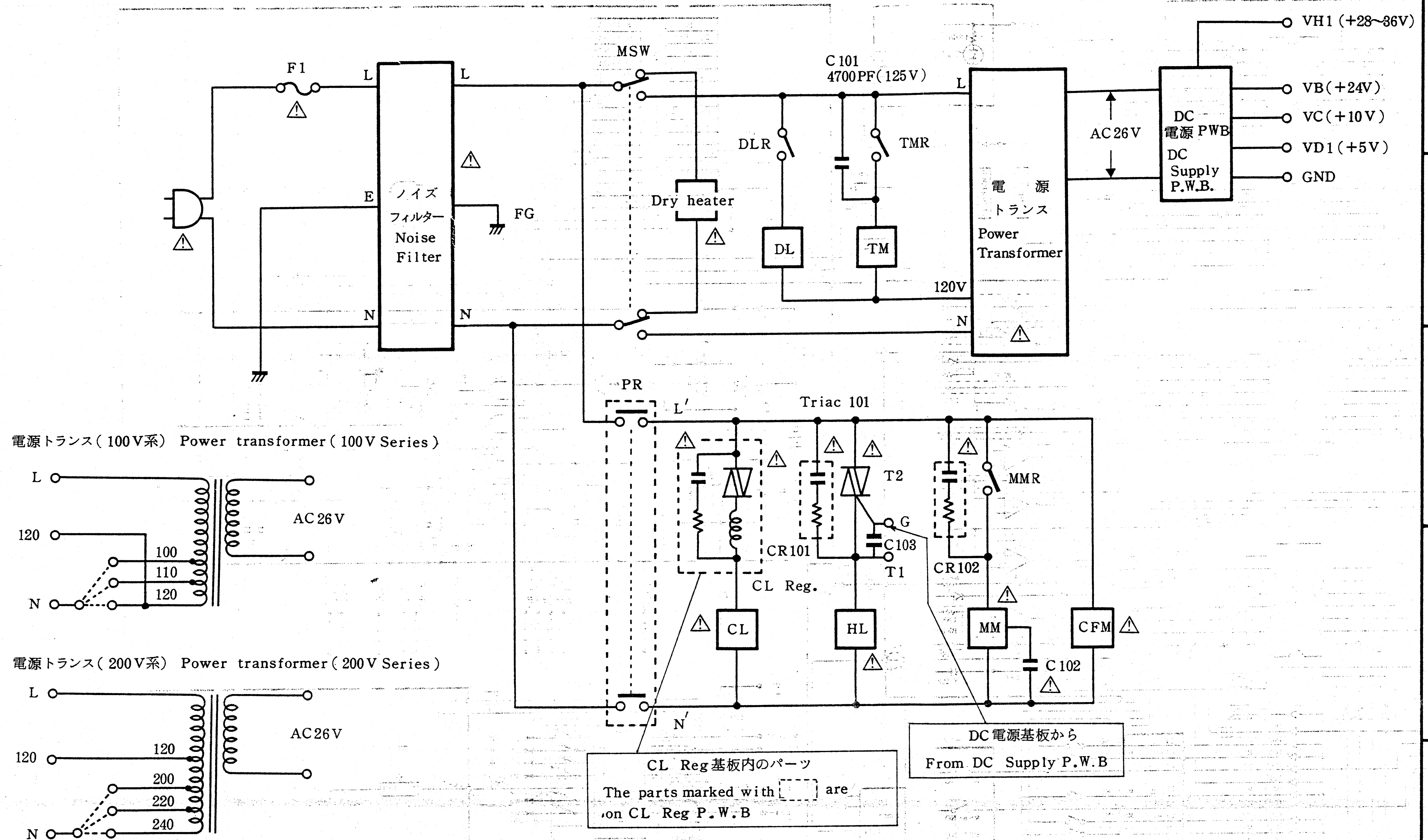
② Capacitor

22000pF ⊗
Ⓐ. . Aluminum electrolytic capacitor.
Ⓣ. . Tantalum electrolytic capacitor.
Ⓜ . Mylar capacitor.
ⓒ. . Ceramic capacitor.
ⓣ. . Temperature-compensated

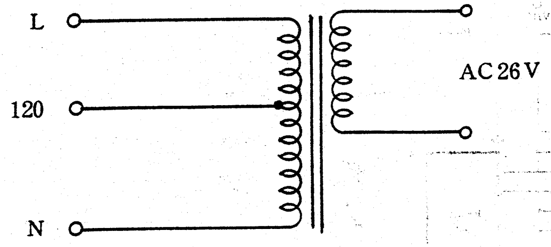
Parts marked with "⚠" is important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

〔2〕AC電源回路

〔2〕AC SUPPLY CIRCUIT

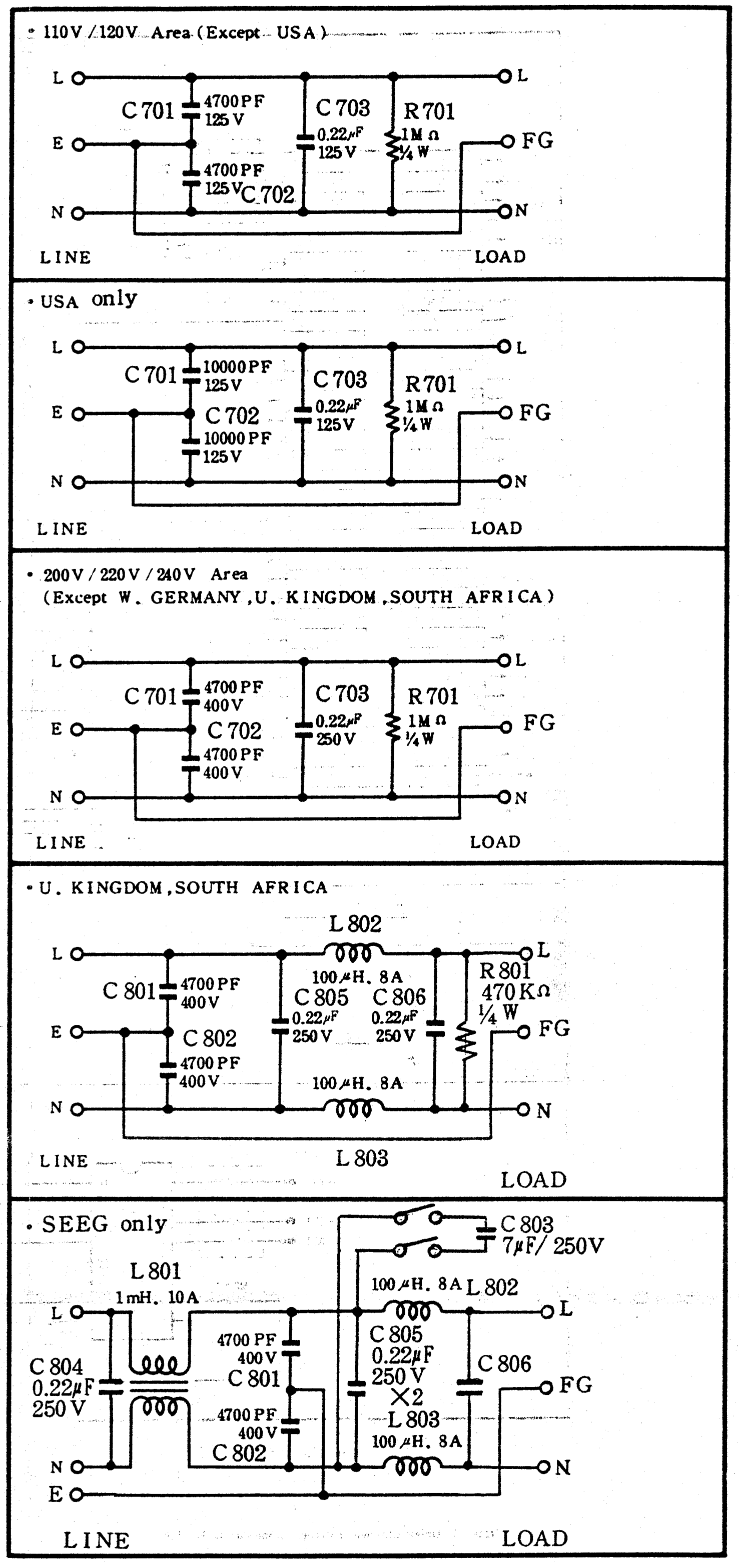

F1
L
E
N
ノイズフィルター
Noise Filter
FG
MSW
Dry heater
DLR
DL
C101
4700PF(125V)
TMR
TM
120V
L
N
電源トランス
Power Transformer
AC26V
DC電源PWB
DC Supply P.W.B.
VH1 (+28~36V)
VB(+24V)
VC(+10V)
VD1(+5V)
GND
PR
L′
N′
Triac 101
CR101
CL Reg.
CL
T2
G
C103
T1
HL
CR102
MMR
MM
C102
CFM
CL Reg基板内のパーツ
The parts marked with [ ] are on CL Reg P.W.B
DC電源基板から
From DC Supply P.W.B
電源トランス(100V系) Power transformer(100V Series)
L
120
N
100
110
120
AC26V
電源トランス(200V系) Power transformer(200V Series)
L
120
N
120
200
220
240
AC26V

Power transformer (127V)


L
120
N
AC26V

	F1	Dry heater	HL(ヒーターランプ Heater lamp)	CL(コピーランプ Copy lamp)	CR101〜CR102	Triac 101
100V	20A	2KΩ 20W	1150W (100V)	85V 325V	0.1μF+120Ω 125V	BCR30GM−8R
110V	20A	2.4KΩ 20W	1150W (110V)	85V 300W		
120V	15A	2.7KΩ 20W	1150W (120V)			
127V	15A	3.2KΩ 20W	1150W (127V)		0.1μF+120Ω 250V	
200V	10A	7.8KΩ 20W	1150W (200V)	170V 300W		AC16F1F
220V	10A	9.4KΩ 20W	1150W (220V)			
240V	10A	11.2KΩ 20W	1150W (240V)			

NOISE FILTER

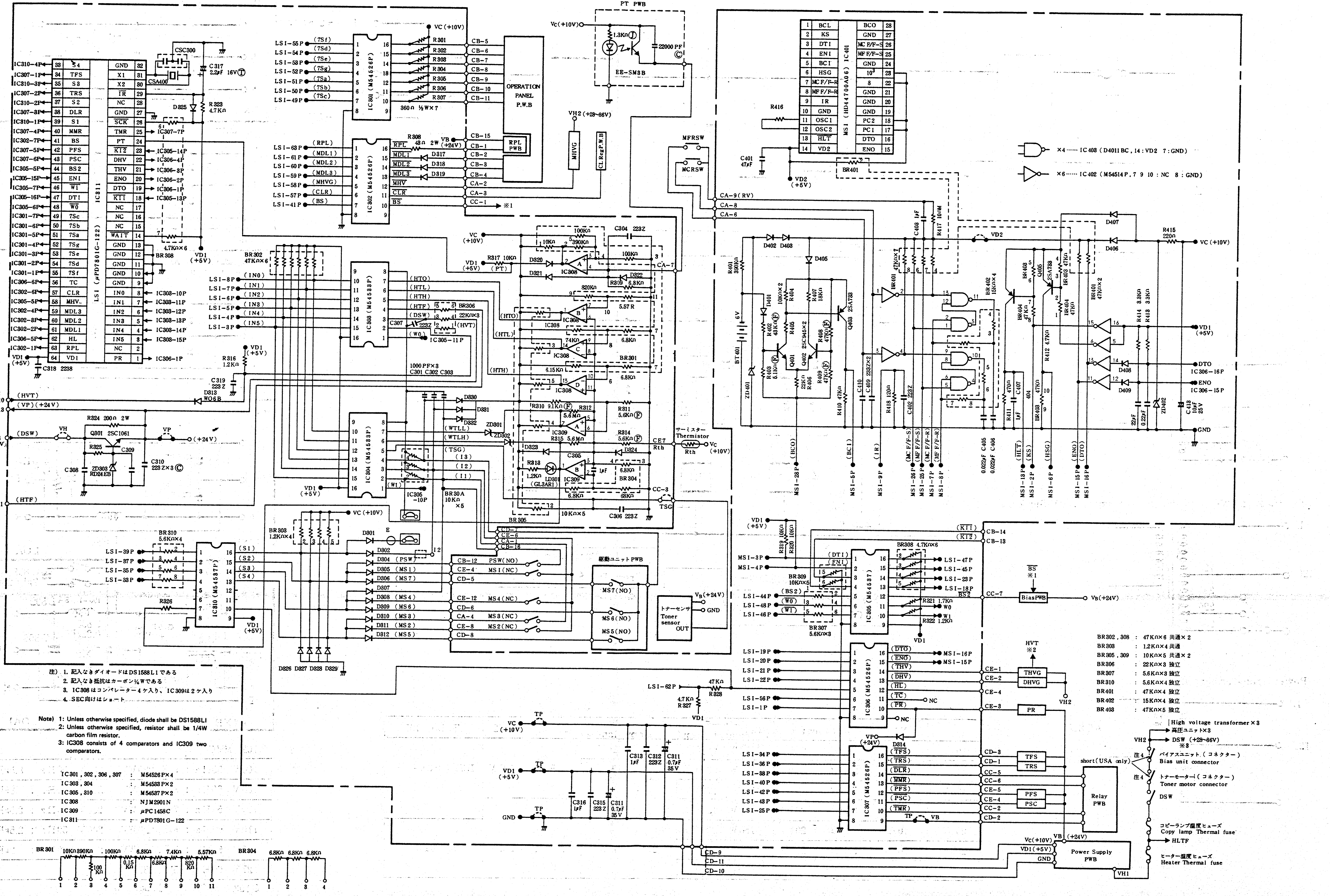

• 110V/120V Area (Except USA)
L
E
N
C701 4700PF 125V
C702 4700PF 125V
C703 0.22μF 125V
R701 1MΩ ¼W
L
FG
N
LINE
LOAD
• USA only
C701 10000PF 125V
C702 10000PF 125V
C703 0.22μF 125V
R701 1MΩ ¼W
LINE
LOAD
• 200V/220V/240V Area (Except W. GERMANY, U. KINGDOM, SOUTH AFRICA)
C701 4700PF 400V
C702 4700PF 400V
C703 0.22μF 250V
R701 1MΩ ¼W
LINE
LOAD
• U. KINGDOM, SOUTH AFRICA
L802 100μH, 8A
C801 4700PF 400V
C802 4700PF 400V
C805 0.22μF 250V
C806 0.22μF 250V
R801 470KΩ ¼W
L803 100μH, 8A
LINE
LOAD
• SEEG only
C803 7μF/250V
L801 1mH, 10A
C804 0.22μF 250V
C801 4700PF 400V
C802 4700PF 400V
L802 100μH, 8A
C805 0.22μF 250V ×2
C806
L803 100μH, 8A
E
LINE
LOAD

C102 (MMC)

100V 50Hz : 9μF, 220WV	200V 50Hz : 3.5μF, 360WV
100V 60Hz : 8μF, 220WV	220V 50Hz : 3μF, 400WV
110V 50Hz : 7μF, 220WV	220V 60Hz : 2.5μF, 400WV
110V 60Hz : 6μF, 220WV	240V 50Hz : 2.5μF, 400WV
120V 60Hz : 5μF, 230WV	240V 60Hz : 2μF, 400WV
127V 60Hz : 5μF, 230WV	

C103 (国内のみ Japan only)

〔3〕メイン回路
〔3〕MAIN CIRCUIT


LSI (μPD7801G-122) IC311
IC301 (M54526P)
IC302 (M54526P)
IC303 (M54533P)
IC304 (M54533P)
IC305 (M54537P)
IC306 (M54526P)
IC307 (M54526P)
IC308
IC309
IC310 (M54537P)
MS1 (HD44700A06) IC401
OPERATION PANEL P.W.B
RPL PWB
PT PWB
EE-SM3B
MHVG
CL Reg P.W.B
MFRSW
MCRSW
駆動ユニットPWB
MS7 (NO)
MS6 (NO)
MS5 (NO)
トナーセンサ Toner sensor
BiasPWB
THVG
DHVG
PR
TFS
TRS
PFS
PSC
Relay PWB
Power Supply PWB
サーミスター Thermistor
VC (+10V)
VD1 (+5V)
VB (+24V)
VH2 (+28~86V)
GND
High voltage transformer ×3
高圧ユニット×3
DSW (+28~86V) ※3
short (USA only)
注4 バイアスユニット（コネクター） Bias unit connector
注4 トナーモーター（コネクター） Toner motor connector
コピーランプ温度ヒューズ Copy lamp Thermal fuse
HLTF
ヒーター温度ヒューズ Heater Thermal fuse
×4 …… IC403 (D4011BC, 14 : VD2 7 : GND)
×6 …… IC402 (M54514P, 7 9 10 : NC 8 : GND)
BR301
10KΩ 390KΩ 100KΩ 6.8KΩ 7.4KΩ 5.57KΩ
100 KΩ
0.15 KΩ
6.8KΩ
820 KΩ
BR304
6.8KΩ 6.8KΩ 6.8KΩ

注） 1. 記入なきダイオードはDS1588L1である
2. 記入なき抵抗はカーボン¼Wである
3. IC308はコンパレーター4ケ入り、IC309は2ケ入り
4. SEC向けはショート

Note) 1: Unless otherwise specified, diode shall be DS1588L1
2: Unless otherwise specified, resistor shall be 1/4W carbon film resistor.
3: IC308 consists of 4 comparators and IC309 two comparators.

IC301, 302, 306, 307 : M54526P×4
IC303, 304 : M54533P×2
IC305, 310 : M54537P×2
IC308 : NJM2901N
IC309 : μPC1458C
IC311 : μPD7801G−122

BR302, 308 : 47KΩ×6 共通×2
BR303 : 1.2KΩ×4 共通
BR305, 309 : 10KΩ×5 共通×2
BR306 : 22KΩ×3 独立
BR307 : 5.6KΩ×3 独立
BR310 : 5.6KΩ×4 独立
BR401 : 47KΩ×4 独立
BR402 : 15KΩ×4 独立
BR403 : 47KΩ×5 独立

〔4〕メイン基板
〔4〕MAIN P. W. B.

(CD)

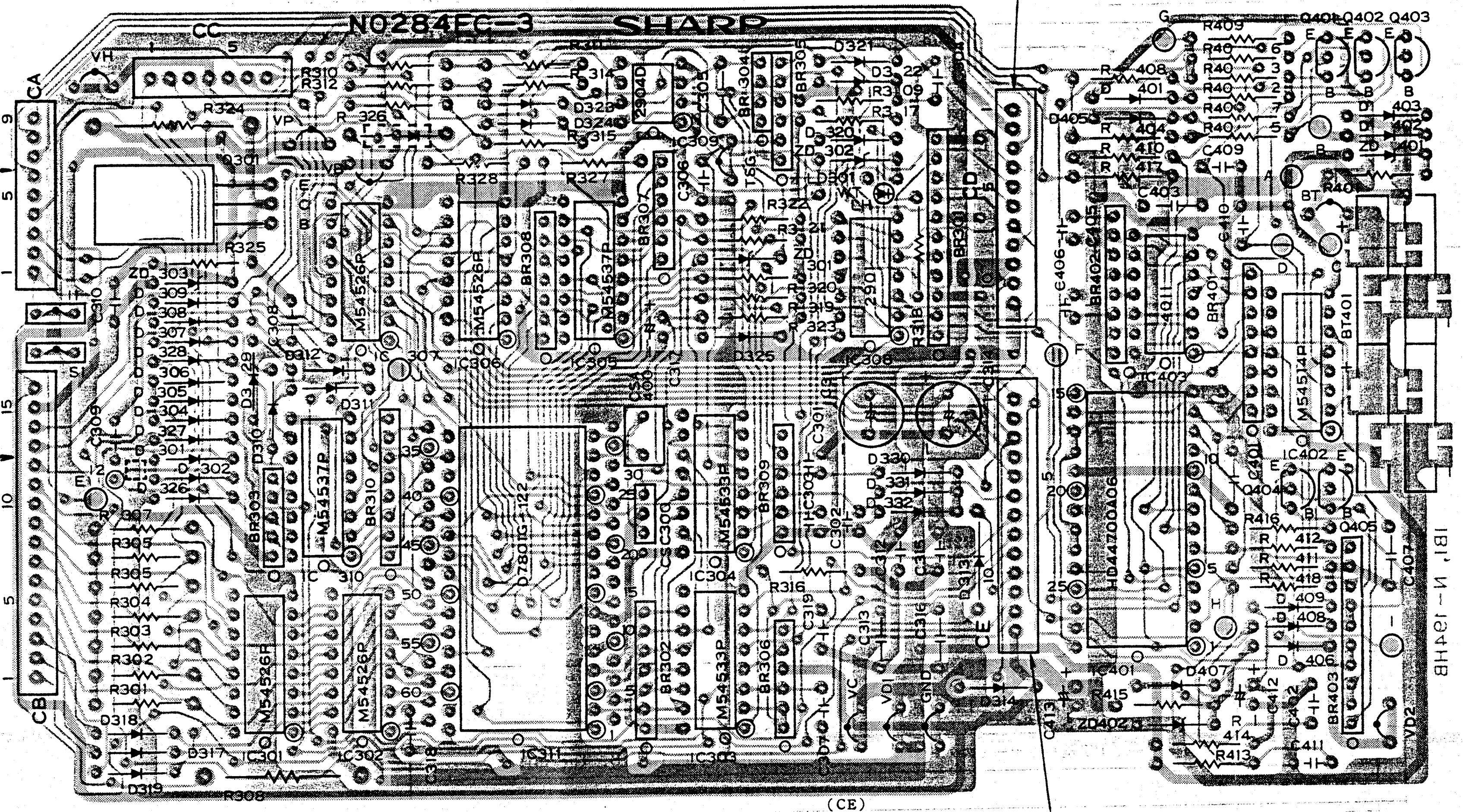
1	$\overline{TRS}$	TRSへ	To TRS
2	V_B(+24V)	DC電源基板から	From DC Supply P.W.B
3	$\overline{TFS}$	TFSへ	To TFS
4	$\overline{HL}$	DC電源基板へ	To DC Supply P.W.B
5	MS7	MS7へ	To MS7
6	MS6	MS6へ	To MS6
7	I3	MS7から	From MS7
8	MS5	MS5へ	To MS5
9	V_C(+10V)	DC電源基板から	From DC Supply P.W.B
10	GND	DC電源基板から	From DC Supply P.W.B
11	VD1(+5V)	DC電源基板から	From DC Supply P.W.B

(CA)

To MFRSW, MCRSW	MFRSW, MCRSWへ	RV	9
From MCRSW	MCRSWから	MCRSW	8
From PT P.W.B	PT基板から	PT	7
From MFRSW	MFRSWから	MFRSW	6
			5
To MS3	MS3へ	MS3	4
To CLReg P.W.B	CLReg基板へ	$\overline{CLR}$	3
To MHVG	MHVGへ	$\overline{MHV}$	2
From MS3	MS3から	I1	1

(CB)

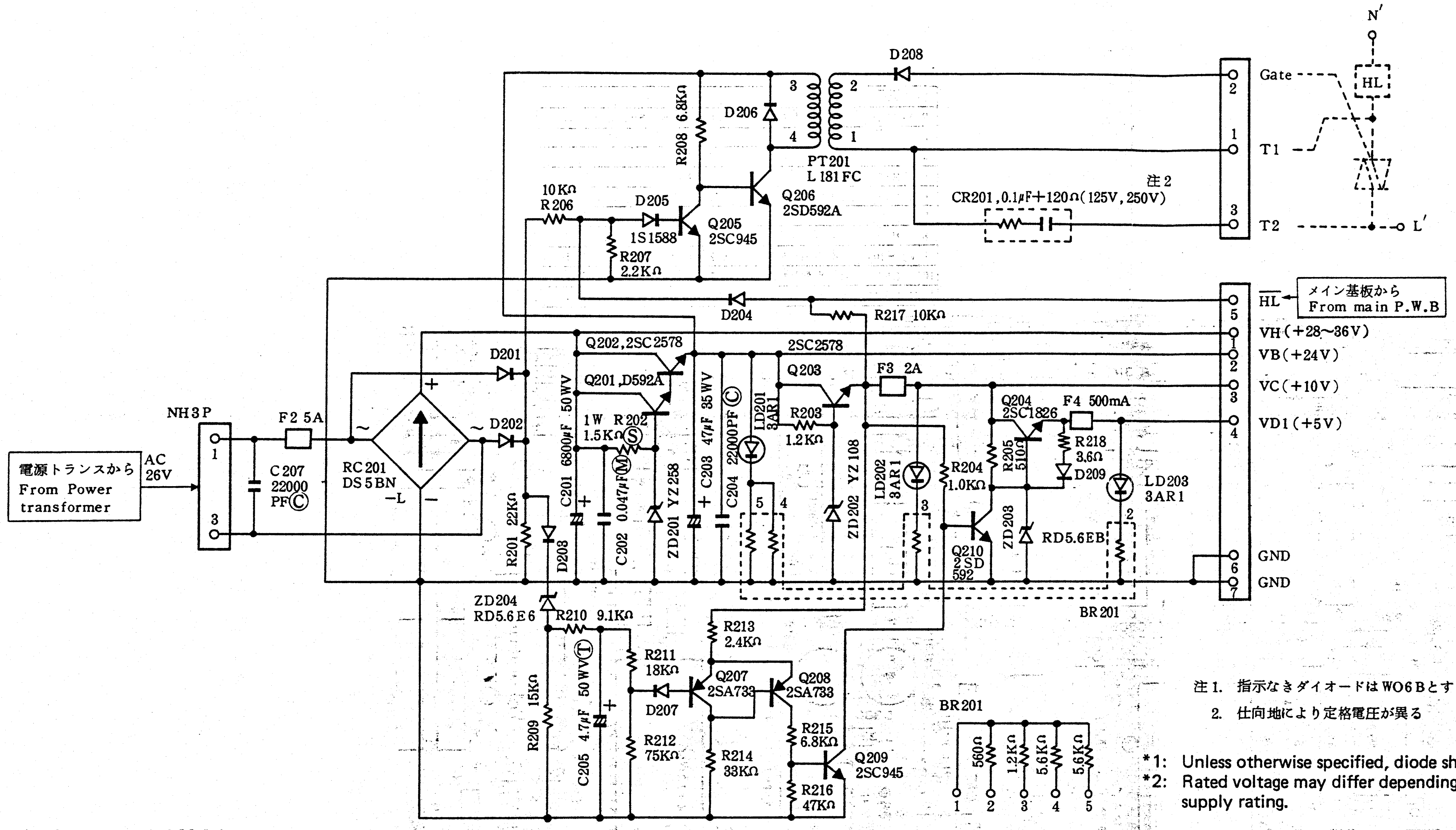
To Print SW	プリントSWへ	I1	16
To RPL P.W.B	RPL基板へ	V_B(+24V)	15
To OPERATION PANEL P.W.B	操作パネル基板へ	KI1	14
		KI2	13
To Print SW	プリントSWへ	PSW	12
To OPERATION PANEL P.W.B	操作パネル基板へ	c	11
		b	10
		a	9
		g	8
		e	7
		d	6
		f	5
		MDL3	4
		MDL2	3
		MDL1	2
To RPL P.W.B	RPL基板へ	$\overline{RPL}$	1



(CE)

1	$\overline{THV}$	THVGへ	To THVG
2	$\overline{DHV}$	DHVGへ	To DHVG
3	$\overline{PR}$	PRへ	To PR
4	$\overline{PSC}$	PSCへ	To PSC
5	$\overline{PFS}$	PFSへ	To PFS
6	I2	MS1, MS2, MS4から	From MS1, MS2, MS4
7	Rth	サーミスターへ	To Thermistor
8	MS2	MS2へ	To MS2
9	MS1	MS1へ	To MS1
10	HVT	THVGから	From THVG
11	HLTF	ヒーターランプ温度ヒューズから	From Temperature fuse (HLTF) for heater lamp
12	MS4	MS4へ	To MS4
13	V_P	PRへ	To PR

〔5〕DC電源回路
〔5〕DC SUPPLY CIRCUIT



電源トランスから From Power transformer
AC 26V
NH3P
F2 5A
C207 22000 PF
RC201 DS5BN
D201
D202
R201 22KΩ
D208
ZD204 RD5.6E6
R210 9.1KΩ
R209 15KΩ
C205 4.7μF 50WV
R211 18KΩ
D207
R212 75KΩ
R213 2.4KΩ
Q207 2SA733
Q208 2SA733
R214 33KΩ
R215 6.8KΩ
R216 47KΩ
Q209 2SC945
Q202, 2SC2578
Q201, D592A
C201 6800μF 50WV
1W R202 1.5KΩ
C202 0.047μF
ZD201 YZ258
C203 47μF 35WV
C204 22000PF
LD201 3AR1
2SC2578
Q203
R203 1.2KΩ
ZD202 YZ108
F3 2A
LD202 3AR1
R204 1.0KΩ
Q210 2SD592
R205 510Ω
ZD203
Q204 2SC1826
F4 500mA
R218 3.6Ω
D209
RD5.6EB
LD203 3AR1
BR201
D204
R217 10KΩ
10KΩ R206
D205 1S1588
R207 2.2KΩ
Q205 2SC945
R208 6.8KΩ
Q206 2SD592A
D206
PT201 L181FC
D208
注2 CR201, 0.1μF+120Ω (125V, 250V)
Gate
T1
T2
HL
N′
L′
HL メイン基板から From main P.W.B
VH (+28~36V)
VB (+24V)
VC (+10V)
VD1 (+5V)
GND
GND
560Ω 1.2KΩ 5.6KΩ 5.6KΩ

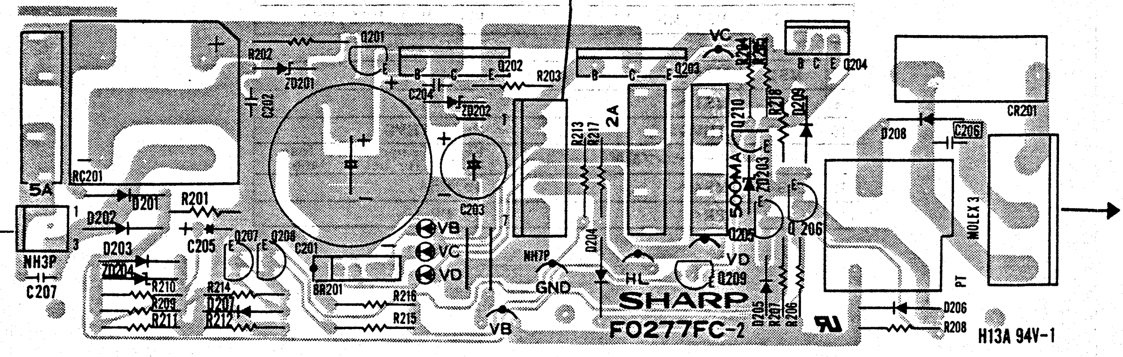
注1. 指示なきダイオードはWO6Bとする
2. 仕向地により定格電圧が異る

*1: Unless otherwise specified, diode shall be WO6B.
*2: Rated voltage may differ depending on local power supply rating.

〔6〕DC電源基板
〔6〕DC SUPPLY P.W.B.

1	VH1 (+28~36V)	ヒーターランプ用温度ヒューズ(HLTF)、 コピーランプ用温度ヒューズへ	To Temperature fuse for heater lamp (HLTF) and copy lamp
2	VB (+24V)	メイン基板，バイアス基板，CLReg基板 TFS，TRS，PFS，PSCへ	To Main P.W.B. Bias P.W.B. CLReg P.W.B. TFS, TRS, PFS, PSC
3	VC (+10V)	メイン基板，PT基板，サーミスターへ	To Main P.W.B. PT P.W.B. Thermister
4	VD1 (+5V)	メイン基板へ	To Main P.W.B
5	$\overline{HL}$	メイン基板から	From Main P.W.B.
6	GND	メイン基板，バイアス基板，CLReg基板へ	To Main P.W.B. PT P.W.B. Bias P.W.B
7	GND	MHVG，THVG，DHVGへ	To MHVG, THVG, DHVG

電源トランスから From power transformer	AC26V	1
	—	2
	AC26V	3



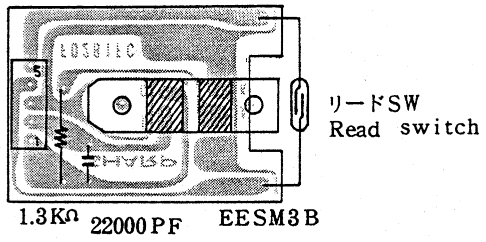
R202
ZD201
Q201
Q202
R203
Q203
VC
Q204
C202
C204
D202
RC201
5A
NH3P
C207
R201
ZD204
D203
C205
R210
R209
R211
D207
R212
Q207
Q208
C201
BR201
R216
R215
C203
VB
VC
VD
NH7P
D204
GND
HL
R213
R217
2A
500MA
Q210
ZD203
R206
Q209
VD
Q205
D209
Q206
D208
C206
CR201
MOLEX3
PT
D206
R208
SHARP
F0277FC-2
H13A 94V-1

3	L′	パワーリレー(PR) Power relay (PR)
2	GATE	トライアック(HL用)へ To Triac (for HL)
1	T1	トライアック(HL用)へ To Triac (for HL)

CB シルク図

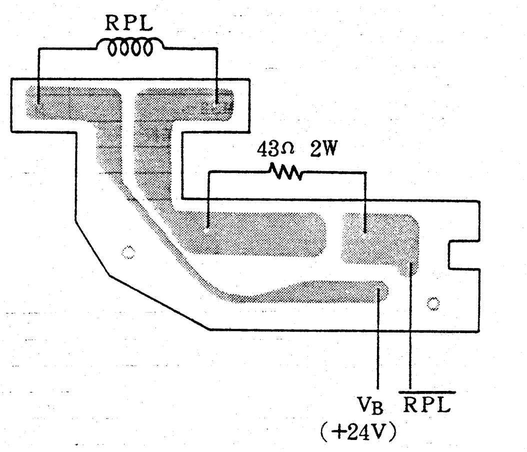
〔7〕PT基板
〔7〕PT P.W.B.

メイン基板から From Main P.W.B	RV	5
	MCRSW	4
	GND	3
	PT	2
	Vc (+10V)	1



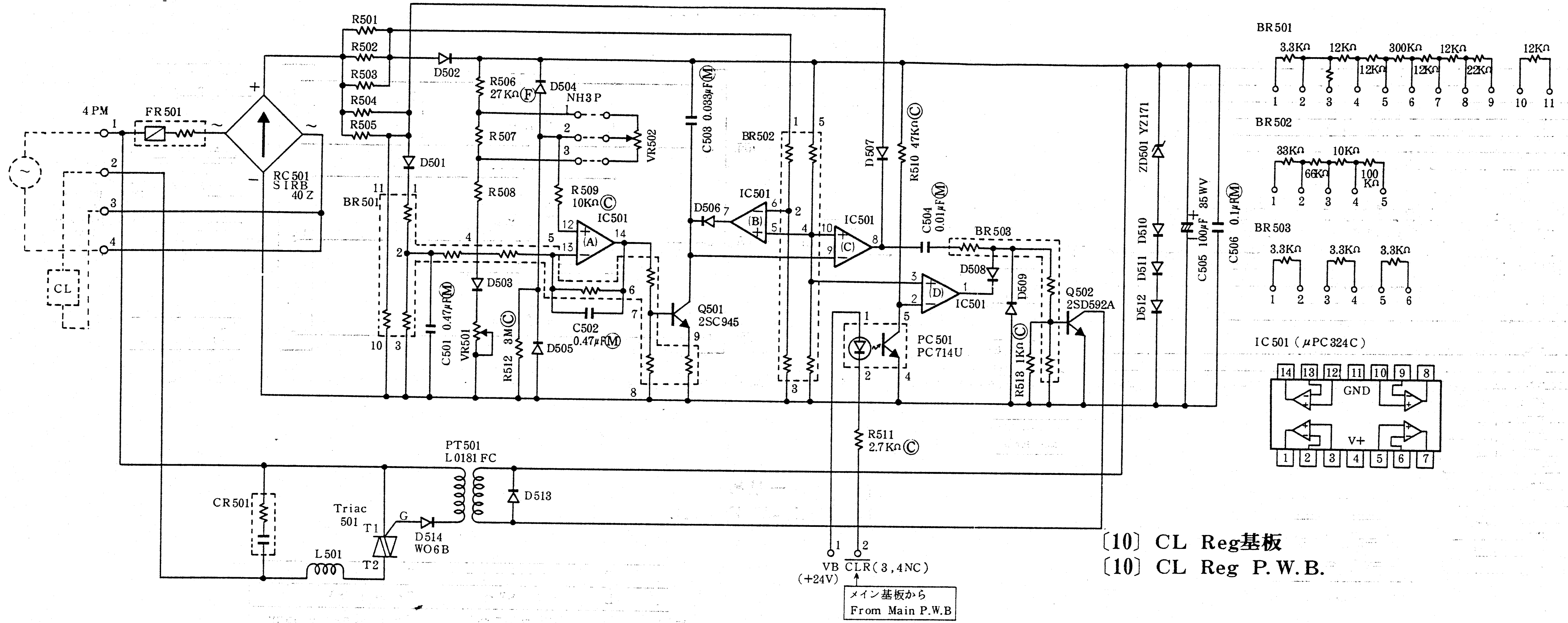
5
リードSW
Read switch
1.3KΩ
22000PF
EESM3B

〔8〕RPL基板
〔8〕RPL P.W.B.



RPL
43Ω 2W
VB (+24V)
$\overline{RPL}$
メイン基板から
From main P.W.B

〔9〕CL Reg回路
〔9〕CL Reg CIRCUIT


R501
R502
R503
R504
R505
D502
R506 27KΩⒻ
D504
NH3P
1
2
3
R507
VR502
R508
R509 10KΩⒸ
IC501
D501
4PM
FR501
RC501 SIRB 40Z
+
−
~
CL
BR501
11
10
3
2
4
5
13
14
12
D503
C501 0.47μⓂ
VR501
R512 3MⒸ
D505
C502 0.47μⓂ
(A)
6
7
8
9
Q501 2SC945
C503 0.033μFⓂ
D506
IC501
(B)
BR502
1
5
D507
R510 47KΩⒸ
IC501
(C)
10
C504 0.01μⓂ
BR503
D508
D509
(D)
IC501
PC501 PC714U
R513 1KΩⒸ
Q502 2SD592A
ZD501 YZ171
D510
D511
D512
C505 100μF 35WV
C506 0.1μFⓂ
R511 2.7KΩⒸ
PT501 L0181FC
D513
CR501
Triac 501
T1
T2
G
D514 WO6B
L501
1 2
VB (+24V)
CLR(3,4NC)
メイン基板から
From Main P.W.B
BR501
3.3KΩ 12KΩ 300KΩ 12KΩ 12KΩ
12KΩ 12KΩ 22KΩ
1 2 3 4 5 6 7 8 9 10 11
BR502
33KΩ 10KΩ
66KΩ 100KΩ
1 2 3 4 5
BR503
3.3KΩ 3.3KΩ 3.3KΩ
1 2 3 4 5 6
IC501 (μPC324C)
14 13 12 11 10 9 8
GND
V+
1 2 3 4 5 6 7

〔10〕CL Reg基板
〔10〕CL Reg P.W.B.

仕向地 部品	国内100V 50Hz Japan only (CPWBF0276FC51)	国内100V 60Hz Japan only (CPWBF0276FC52)	EX 200VSeries 50Hz Except W.GERMANY (CPWBF0276FC53)	EX 200V Series 60Hz (CPWBF0276FC54)	SEEG 220V 50Hz (CPWB0276FC55)	EX 100V Series 50Hz (CPWBF0276FC56)	EX 100V Series 60Hz (CPWBF0276FC57)
FR501	220Ω 1W RF-XZ0102FCZZ	←	820Ω 1W RR-XZ0103FCZZ	←	←	220Ω 1W RR-XZ0103FCZZ	←
R501 R502 R503	22KΩ 2W 酸金 22KΩ 2W 酸金 ―――― VRS-ST3DB223J×2	←	82KΩ 2W 酸金 82KΩ 2W 酸金 82KΩ 2W 酸金 VRS-ST3DB823J×3	←	←	22KΩ 2W 酸金 22KΩ 2W 酸金 ―――― VRS-ST3DB223J×2	←
R504 R505	200KΩ ¼W 金被 200KΩ ¼W 金被 VRN-RT2EK204F×2	←	412KΩ ¼W 金被 412KΩ ¼W 金被 RR-NZ0135FCZZ×2	←	←	200KΩ ¼W 金被 200KΩ ¼W 金被 VRN-RT2EK204F×2	←
L501	RCILF0009FCZZ	←	←	←	RCILF0025FCZZ	RCILF0009FCZZ	←
CR501	0.1μF+120Ω(125V) RMPTA0017FCZZ	←	0.1μF+120Ω(250V) RMPTA0018FCZZ	←	←	0.1μF+120Ω(125V) RMPTA0017FCZZ	←
Triac501	AC12DIM VHSAC12DIM/−1	←	AC08FIM VHSAC08FIM/−1	←	←	AC12DIM VHSAC12DIM/−1	←
R507	6.2KΩ ¼W 金被 VRN-RT2EK622F	←	5.6KΩ ¼W 金被 VRN-RT2EK562F	←	←	←	←
R508	12KΩ ¼W 金被 VRN-RT2EK123F	12.4KΩ ¼W 金被 RR-NZ0192FCZZ	8.2KΩ ¼W 金被 VRN-RT2EK822F	←	←	←	←
VR501	3KΩ RVR-M3320QCZZ	←	4.7KΩ RVR-MD320QCZZ	←	←	←	←

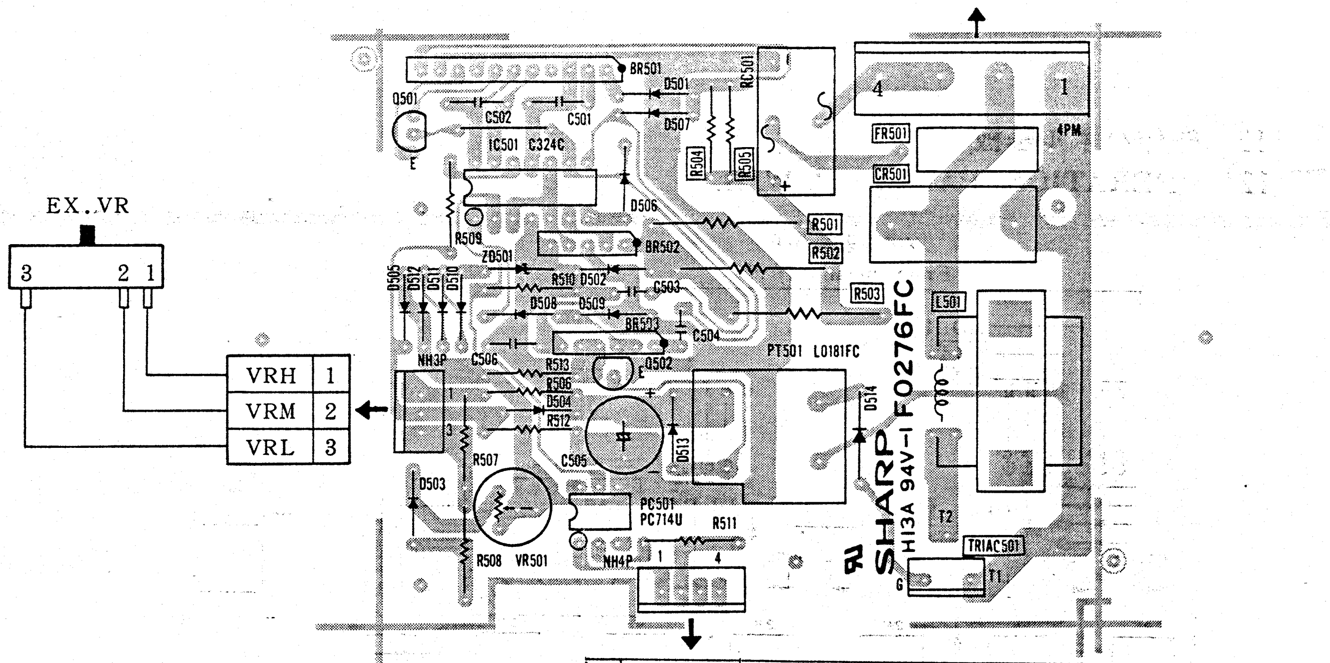
注1. 指示なきダイオード（D501〜D513）は1S1588L1とする

2. FR501，R501〜R505，R507，R508，CR501，L501，Triac501 は表参照のこと

*1: Unless otherwise specified, diode shall be 1S1588L1 (D501-D513).

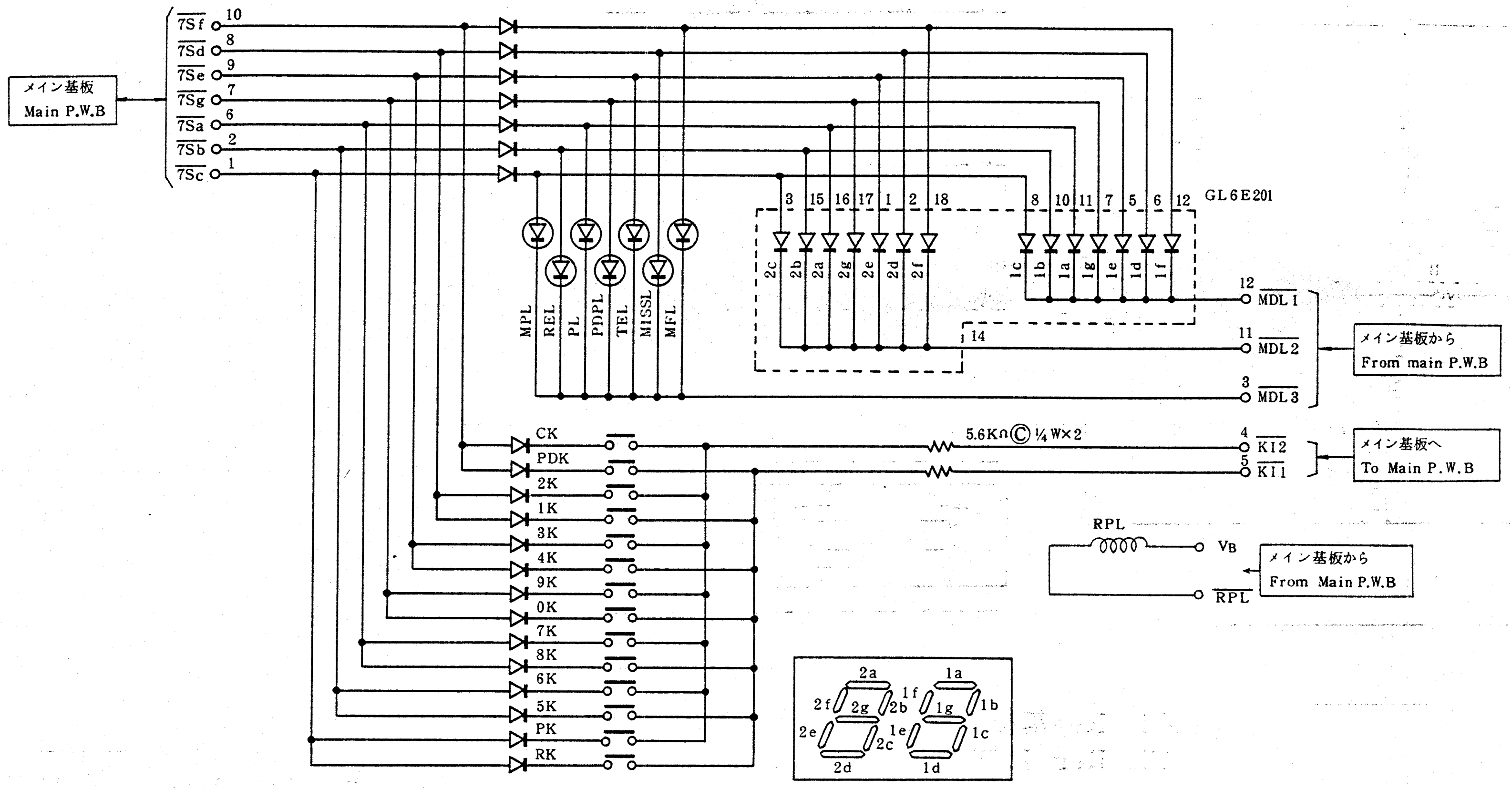
*2: See separate chart for FR501, R501-R505, R507, R508, CR501, L501, and triac 501.

1	L′(AC)	パワーリレーから（PR） From Power relay(PR)
2	CL	コピーランプ Copy lamp
3	CL	コピーランプへ To Copy lamp
4	N′(AC)	パワーリレーから（PR） From Power relay(PR)


EX. VR
3
2 1
VRH 1
VRM 2
VRL 3
BR501
D501
RC501
Q501
C502
C501
D507
IC501 C324C
R504
R505
4
1
4PM
FR501
CR501
D506
R509
BR502
R501
R502
ZD501
R510 D502
C503
D508
D509
BR503
C504
R503
D510
D511
D512
D505
L501
NH3P
C506
R513
R506
D504
R512
Q502
PT501 L0181FC
R507
C505
D513
D514
D503
PC501 PC714U
R511
R508
VR501
NH4P
1
4
SHARP
H13A 94V-1 F0276FC
T2
TRIAC501
G
T1

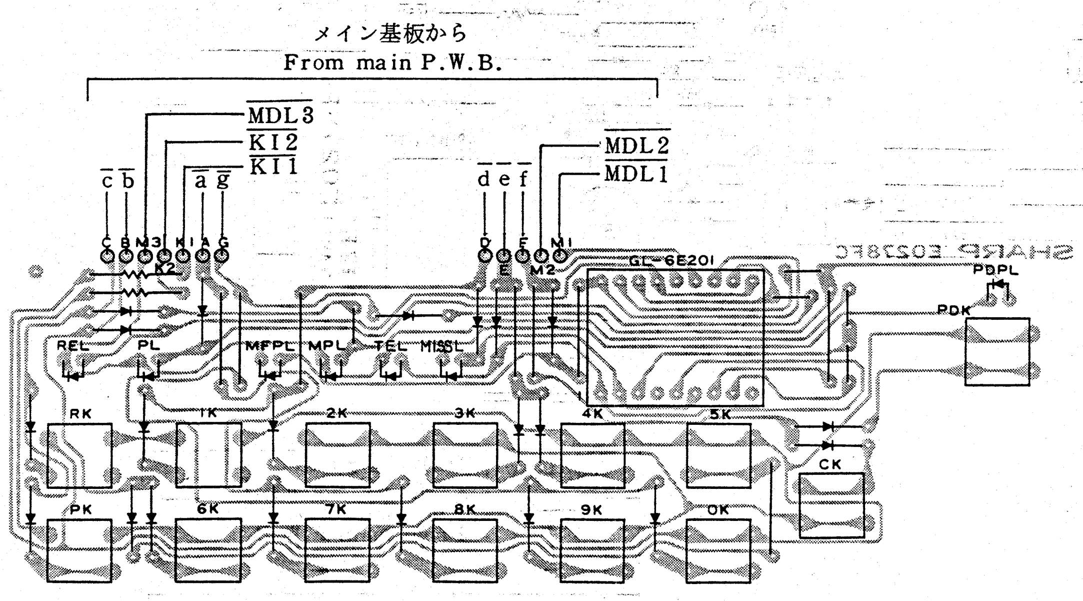
1	V_B(+24V)	DC電源基板から From DC Supply P.W.B
2	$\overline{\text{CLR}}$	メイン基板から From main P.W.B
3	—	—
4	—	—

〔11〕 操作パネル回路
〔11〕 OPERATION PANEL CIRCUIT

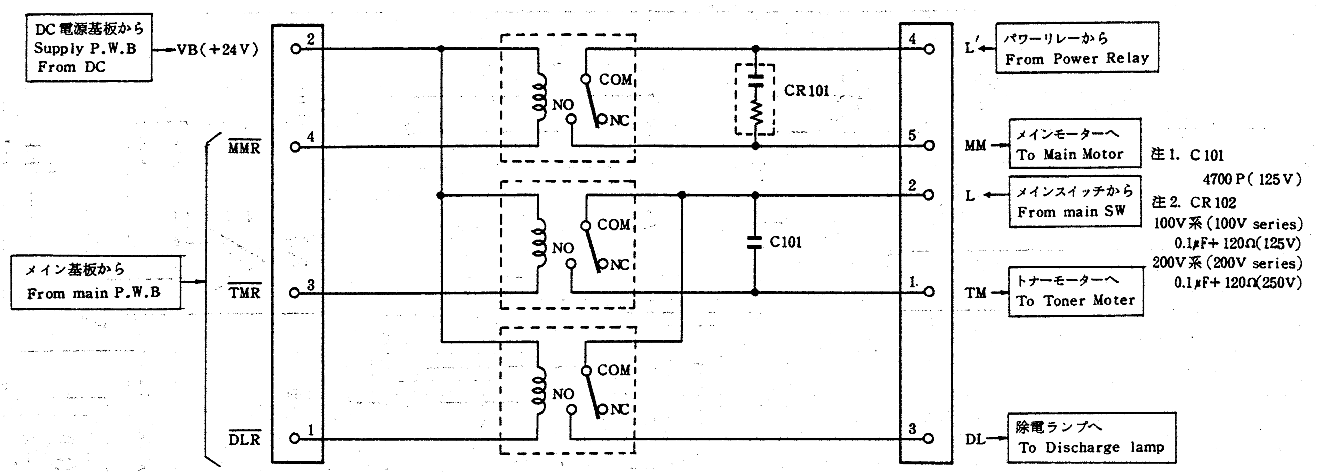

メイン基板
Main P.W.B
7Sf 10
7Sd 8
7Se 9
7Sg 7
7Sa 6
7Sb 2
7Sc 1
MPL
REL
PL
PDPL
TEL
MISSL
MFL
GL6E201
12 MDL1
11 MDL2
3 MDL3
14
メイン基板から
From main P.W.B
CK
PDK
2K
1K
3K
4K
9K
0K
7K
8K
6K
5K
PK
RK
5.6KΩ Ⓒ ¼W×2
4 KI2
5 KI1
メイン基板へ
To Main P.W.B
RPL
VB
RPL
メイン基板から
From Main P.W.B
2a 1a 2f 2g 2b 1f 1g 1b 2e 2c 1e 1c 2d 1d

GL6E201

〔12〕 操作パネル基板
〔12〕 OPERATION PANEL P. W. B.


メイン基板から
From main P.W.B.
MDL3
KI2
KI1
c b
a g
d e f
MDL2
MDL1
GL-6E201
PDPL
PDK
REL
PL
MFPL
MPL
TEL
MISSL
RK
1K
2K
3K
4K
5K
CK
PK
6K
7K
8K
9K
0K

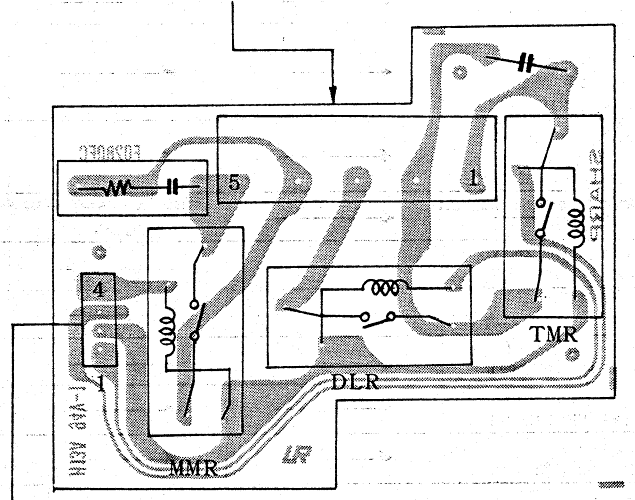
〔13〕 リレー回路
〔13〕 RELAY CIRCUIT


DC電源基板から
Supply P.W.B
From DC
VB(+24V)
メイン基板から
From main P.W.B
MMR
TMR
DLR
COM
NO
NC
CR101
C101
L′
パワーリレーから
From Power Relay
MM
メインモーターへ
To Main Motor
L
メインスイッチから
From main SW
TM
トナーモーターへ
To Toner Moter
DL
除電ランプへ
To Discharge lamp

注1. C101
4700P(125V)
注2. CR102
100V系(100V series)
0.1μF+120Ω(125V)
200V系(200V series)
0.1μF+120Ω(250V)

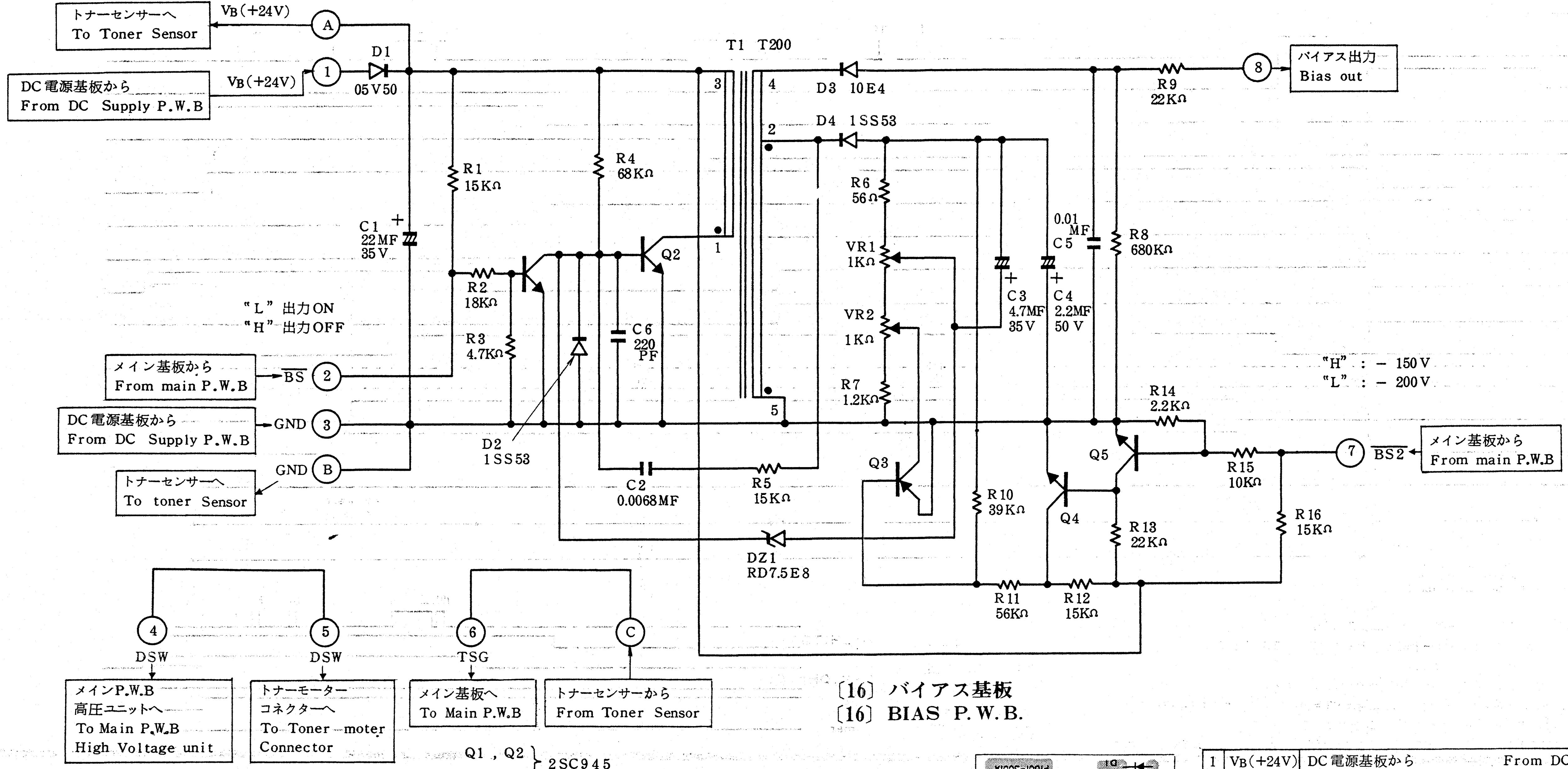
〔14〕 リレー基板
〔14〕 RELAY P. W. B.

1	TM	トナーモーターへ	To Toner Moter
2	L	メインSWへ	To Main SW
3	DL	除電ランプへ	To Discharge lamp
4	L′	パワーリレーから	From Power Relay
5	MM	メインモーターへ	To Main Motor


5
1
4
TMR
DLR
MMR

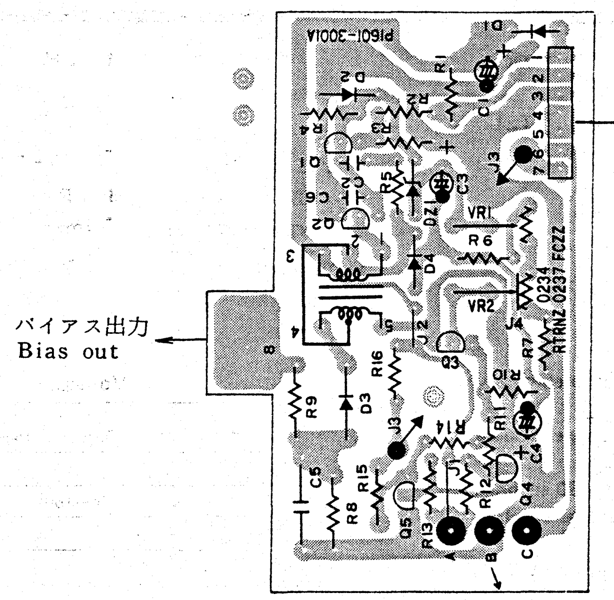
From Main P.W.B　メイン基板から	$\overline{\text{MMR}}$	4
	$\overline{\text{TMR}}$	3
From DC Supply P.W.B　DC電源基板から	VB(+24V)	2
From Main P.W.B　メイン基板から	$\overline{\text{DLR}}$	1

〔15〕バイアス回路
〔15〕BIAS CIRCUIT


トナーセンサーへ
To Toner Sensor
V_B(+24V)
A
DC電源基板から
From DC Supply P.W.B
V_B(+24V)
1
D1
05V50
T1 T200
3
4
2
1
5
D3 10E4
D4 1SS53
R9
22KΩ
8
バイアス出力
Bias out
R1
15KΩ
R4
68KΩ
R6
56Ω
VR1
1KΩ
VR2
1KΩ
R7
1.2KΩ
0.01
MF
C5
R8
680KΩ
C1
22MF
35V
R2
18KΩ
Q2
C3
4.7MF
35V
C4
2.2MF
50V
"L" 出力ON
"H" 出力OFF
R3
4.7KΩ
C6
220
PF
"H" : − 150V
"L" : − 200V
R14
2.2KΩ
メイン基板から
From main P.W.B
$\overline{BS}$
2
DC電源基板から
From DC Supply P.W.B
GND
3
Q3
Q5
7
$\overline{BS2}$
メイン基板から
From main P.W.B
R15
10KΩ
トナーセンサーへ
To toner Sensor
GND
B
D2
1SS53
C2
0.0068MF
R5
15KΩ
R10
39KΩ
Q4
R13
22KΩ
R16
15KΩ
DZ1
RD7.5E8
R11
56KΩ
R12
15KΩ
4
DSW
5
DSW
6
TSG
C
メインP.W.B
高圧ユニットへ
To Main P.W.B
High Voltage unit
トナーモーター
コネクターへ
To Toner moter
Connector
メイン基板へ
To Main P.W.B
トナーセンサーから
From Toner Sensor

Q1 , Q2 } 2SC945
Q4 , Q5 }
Q3 2SA733

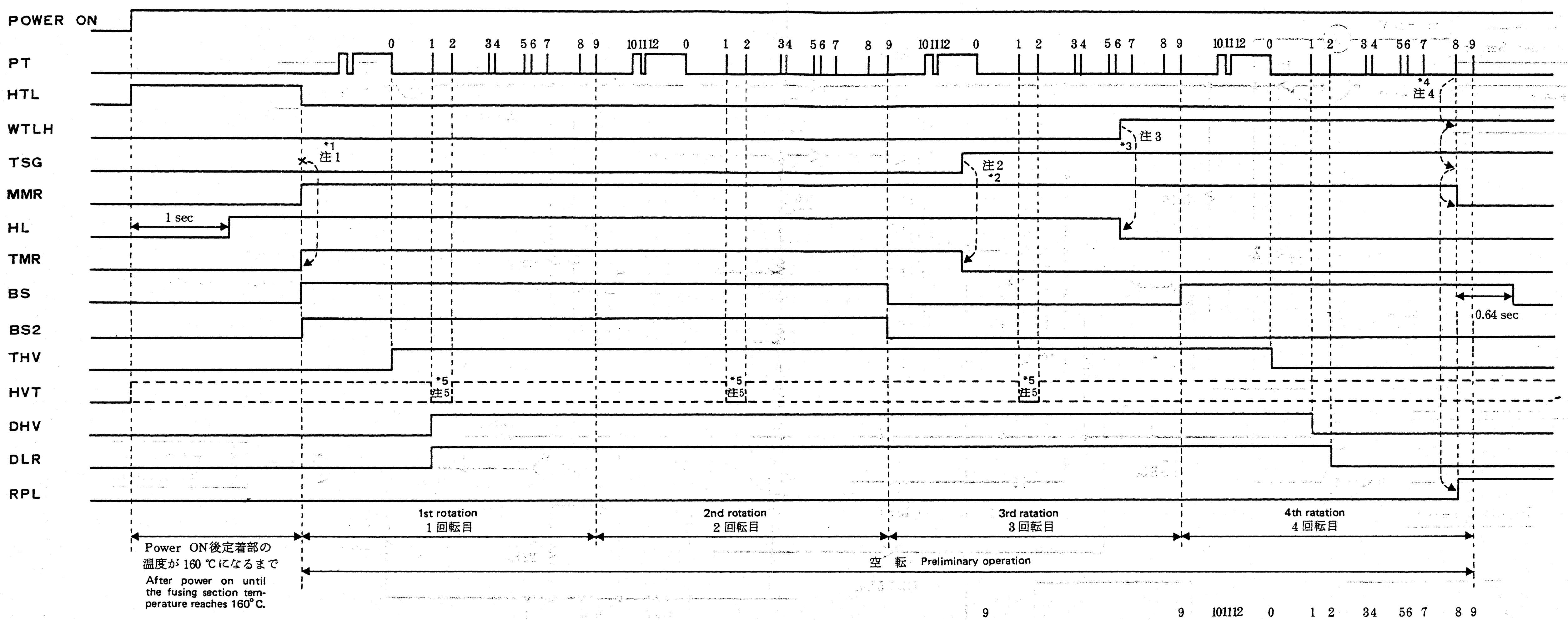
〔16〕バイアス基板
〔16〕BIAS P.W.B.


PI601-3001A
バイアス出力
Bias out
D1
R1
C1
D2
R4
R2
R3
Q1
C6
R5
C3
Q3
Q2
D2
VR1
R6
D4
VR2
R16
J2
Q3
D3
R9
J3
R14
R10
R11
C4
C5
R15
R8
R13
Q5
R12
Q4
8
1
2
3
4
5
6
7
A
B
C
RTKNZ 0237 FCZZ
0234

1	V_B(+24V)	DC電源基板から	From DC supply P.W.B
2	$\overline{BS}$	メイン基板から	From main P.W.B
3	GND	DC電源基板から	From DC supply P.W.B
4	DSW	メイン基板、高圧ユニットへ	To main P.W.B,High Voltage unit
5	DSW	トナーモーターコネクターへ	To toner motor connector
6	TSG	メイン基板へ	To main P.W.B
7	$\overline{BS2}$	メイン基板から	From main P.W.B

Ⓐ	V_B(+24V)	トナーセンサーへ	To toner Sensor
Ⓑ	GND	トナーセンサーへ	To toner Sensor
Ⓒ	TSG	トナーセンサーから	From toner Sensor

〔17〕 タイムチャート　A (空転)
〔17〕 TIME CHART A (Preliminary operation)


POWER ON
PT
HTL
WTLH
TSG
MMR
HL
TMR
BS
BS2
THV
HVT
DHV
DLR
RPL
0 1 2 3 4 5 6 7 8 9 10 11 12
1 sec
0.64 sec
*1 注 1
注 2 *2
*3 注 3
*4 注 4
*5 注 5
1st rotation
1 回転目
2nd rotation
2 回転目
3rd ratation
3 回転目
4th ratation
4 回転目
空　転　Preliminary operation

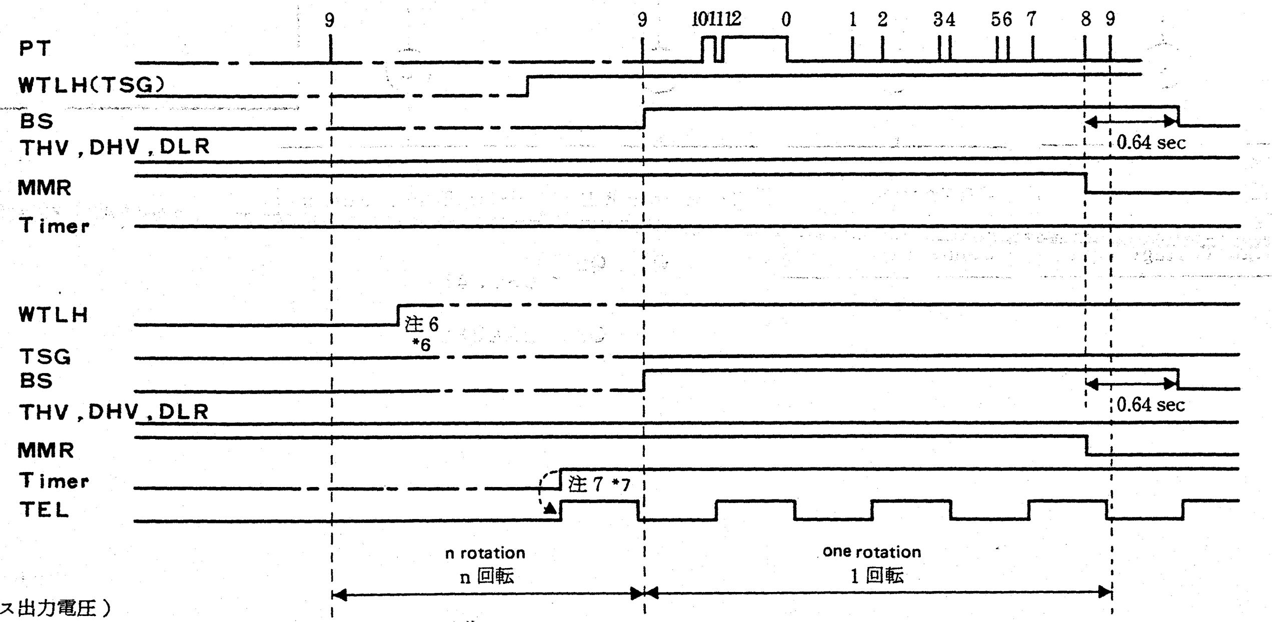
Power ON後定着部の温度が 160 ℃になるまで
After power on until the fusing section temperature reaches 160° C.

注 1.　トナーが少ない場合、トナー補給を行う。(TSG“ L ”の時)
注 2.　トナーが規定量になると、トナー補給をストップする。(TSG “ H ”の時)
注 3.　定着部の温度が 180 ℃に達した時。
注 4.　WTLH , TSGがともに“ H ”の時、空転サイクルが終了する。
WTLH , TSGのどちらか一方でも“ L ”の時はPT＝9のタイミングでBIASをOFFし、WTLHまたはTSGが“ H ”になるまで空転をつづける。
注 5.　THVG　ONでPT＝1の時、HVTが“ H ”であれば高圧ユニットトラブル“ C2 ”となる。
注 6.　WTLHは電源ON後、約 60 秒以内に必ず“ H ”になる。
しかし電源ON後、約 80 秒または空転開始後、約 60 秒経過してもWTLHが“ L ” の場合は、低温トラブル“ H4 ”となる。
注 7.　空転開始後、約 120 秒経過してもTSGが“ L ”の場合 (但しWTLHは“ H ”)は、 TEL を 0.5 秒ON、0.5 秒OFFで点滅させる。
尚、この場合はRPLも点灯する。

*1: Supplies toner when low level (TSG in low state).
*2: Toner supply is stopped whcn TSG high state.
*3: When the fusing section reaches 180°C.
*4: The preliminary cycle terminates when both WTLH and TSG goes high.
If either WTLH or TSG is low, BIAS is turned off “PT=9” to continue preliminary cycle until both WTLH and TSG goes high.
*5: If HVT is high when “PT=1” with THVG on, it will cause the high voltage trouble status “C2”.
*6: WTLH goes high in about 60 seconds after power on. If does not within 80 seconds after power on or 60 seconds after start of the preliminary cycle, it causes the low temperature status “H4”.
*7: If TSG stays low state 120 seconds after the start of the preliminary cycle with WTLH high, TEL flashes 0.5 second ON and 0.5 second OFF. RPL will turn on

タイマー設定時間内にWTL , TSG が規定レベルに達した時
When WTL and TSG reache the level within the timer time.

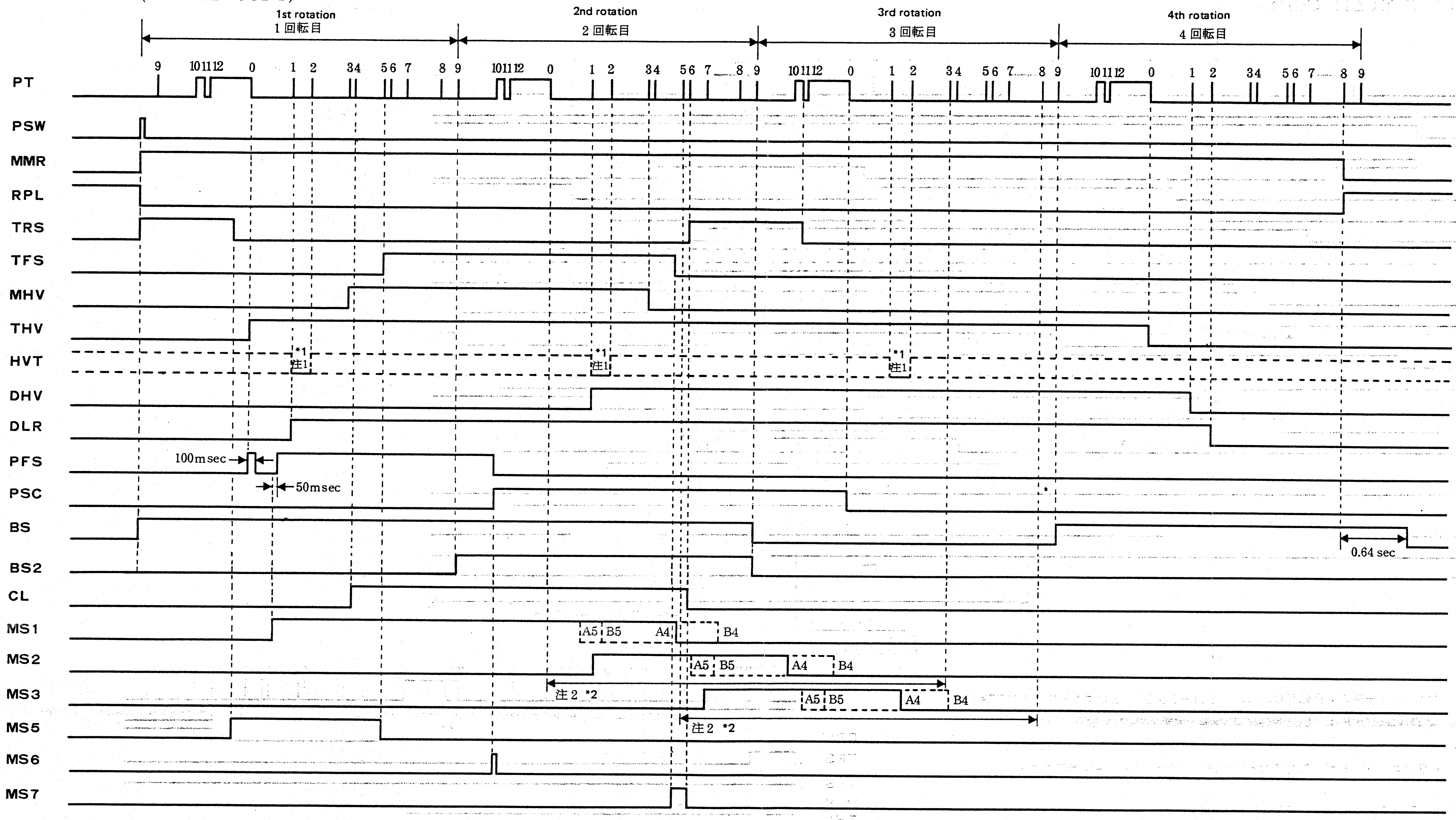
タイマー設定時間内にWTL , TSG が規定レベルに達しない時
When WTL and TSG does not reach the level within the timer time.


PT
WTLH(TSG)
BS
THV , DHV , DLR
MMR
Timer
WTLH
TSG
BS
THV , DHV , DLR
MMR
Timer
TEL
9 9 10 11 12 0 1 2 3 4 5 6 7 8 9
0.64 sec
0.64 sec
注 6 *6
注 7 *7
n rotation
n 回転
one rotation
1 回転

(バイアス出力電圧)
(Bias Voltage)

BS	BS2	出力電圧 Output Voltage
H	H	−198V
H	L	−150V
L	−	0V

〔18〕 タイムチャート B（シングルコピー）
〔18〕 TIME CHART B (SINGLE COPY)



注1. 高圧ユニットトラブル“C2”については、空転タイムチャート参照のこと。

注2. ミスフィードタイミング

1. ハクリミスフィード

2回転目のPT=0から3回転目のPT=3までの間MS2 ONを許可し、この期間以外でMS2がONした場合、マシンの動作を止めミスフィード表示する。
また2回転目のPT=3でPSCをONさせているのにMS2がONしていない場合、ハクリミスと判断してマシンの動作を止めミスフィード表示する。

2. 出紙ミスフィード

2回転目のPT=5から3回転目のPT=8までの間MS3 ONを許可し、この期間以外でMS3がONした場合、マシンの動作を止めミスフィード表示する。
また2回転目終了のPT=9でMS3がONしていない場合、出紙ミスと判断してマシンの動作を止めミスフィード表示する。

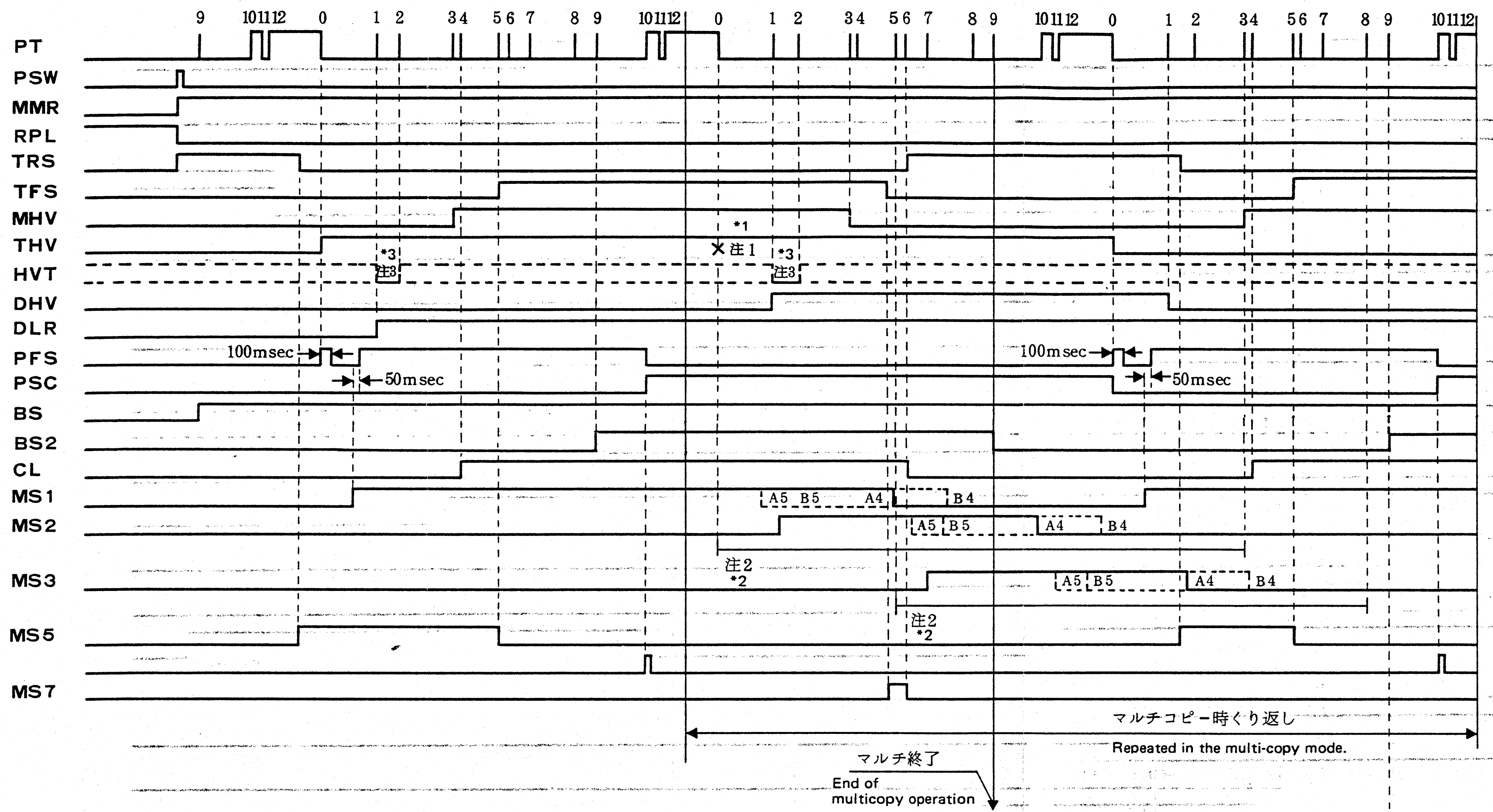
*1: For the high voltage trouble status “C2”, refer to the preliminary cycle timing chart.

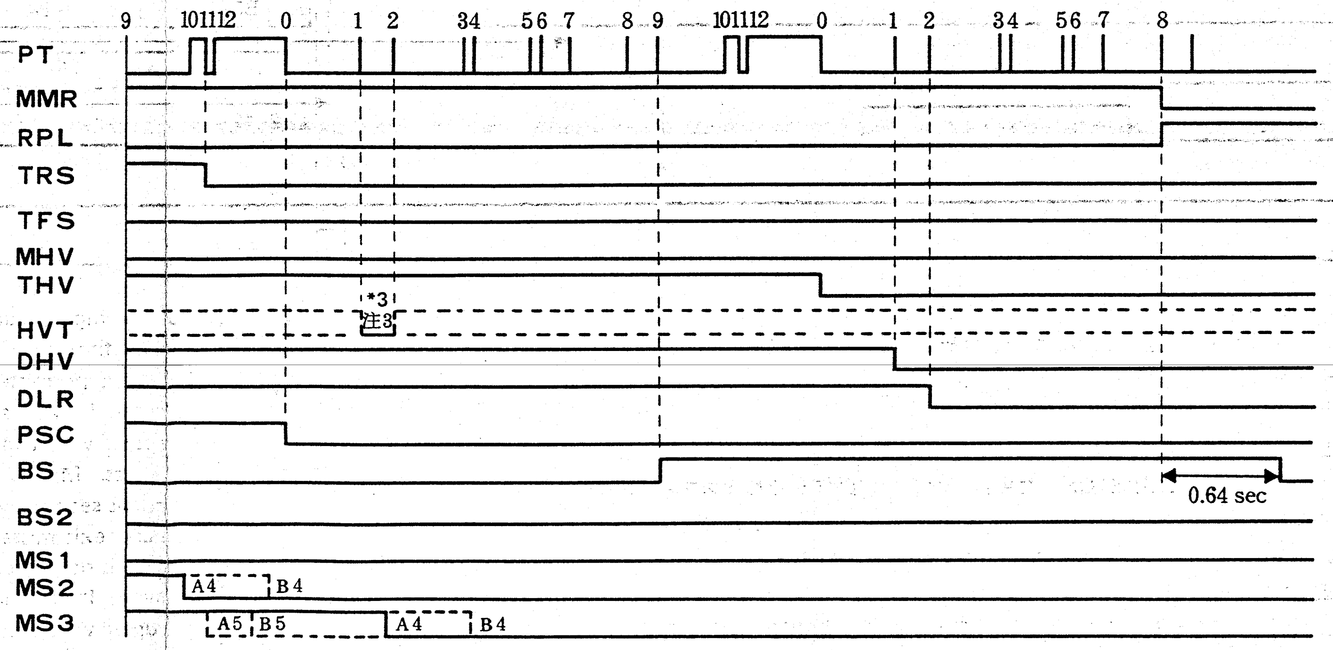
*2: Misfeed timing

1. MS2 is permitted to acuate from “PT=0” of the second cycle to “PT=3” of the third cycle. If MS2 should actuate out of these timings, the machine operation is interrupted with a misfeed.
In case MS2 did not turn on when if PSC was turned on in the timing of “PT=3” of the second cycle, the machine operation is interrupted with a misfeed.

2. Paper exit misfeed
MS3 is permitted to actuate from “PT=5” of the second cycle to “PT=8” of the third cycle. If MS3 should actuate out of these timies, the machine operation is interrupted with a misfeed.
In case MS3 did not turn on with “PT=9” of the second cycle termination, it is assumed to be a paper exit misfeed and the machine operation is interrupted with a misfeed.

〔19〕タイムチャート C（マルチコピー）
〔19〕TIME CHART C (MULTI COPY)


9 10 11 12 0 1 2 3 4 5 6 7 8 9
PT
PSW
MMR
RPL
TRS
TFS
MHV
THV
HVT
DHV
DLR
PFS
PSC
BS
BS2
CL
MS1
MS2
MS3
MS5
MS7
100msec
50msec
*1
×注1
*3
注3
A5 B5 A4 B4
注2
*2
マルチコピー時くり返し
Repeated in the multi-copy mode.
マルチ終了
End of multicopy operation


9 10 11 12 0 1 2 3 4 5 6 7 8 9 10 11 12 0 1 2 3 4 5 6 7 8
PT
MMR
RPL
TRS
TFS
MHV
THV
HVT
DHV
DLR
PSC
BS
BS2
MS1
MS2
MS3
*3
注3
0.64 sec
A4 B4
A5 B5 A4 B4

注 1. マルチコピー時の 4 回転目以降において 2n+1 回転目（n はコピー枚数）の PT=0 で THVG が OFF し、2n 回転目の PT=0（×部）で ON する。

注 2. ミスフィードタイミングについては、シングルコピータイムチャート参照のこと。

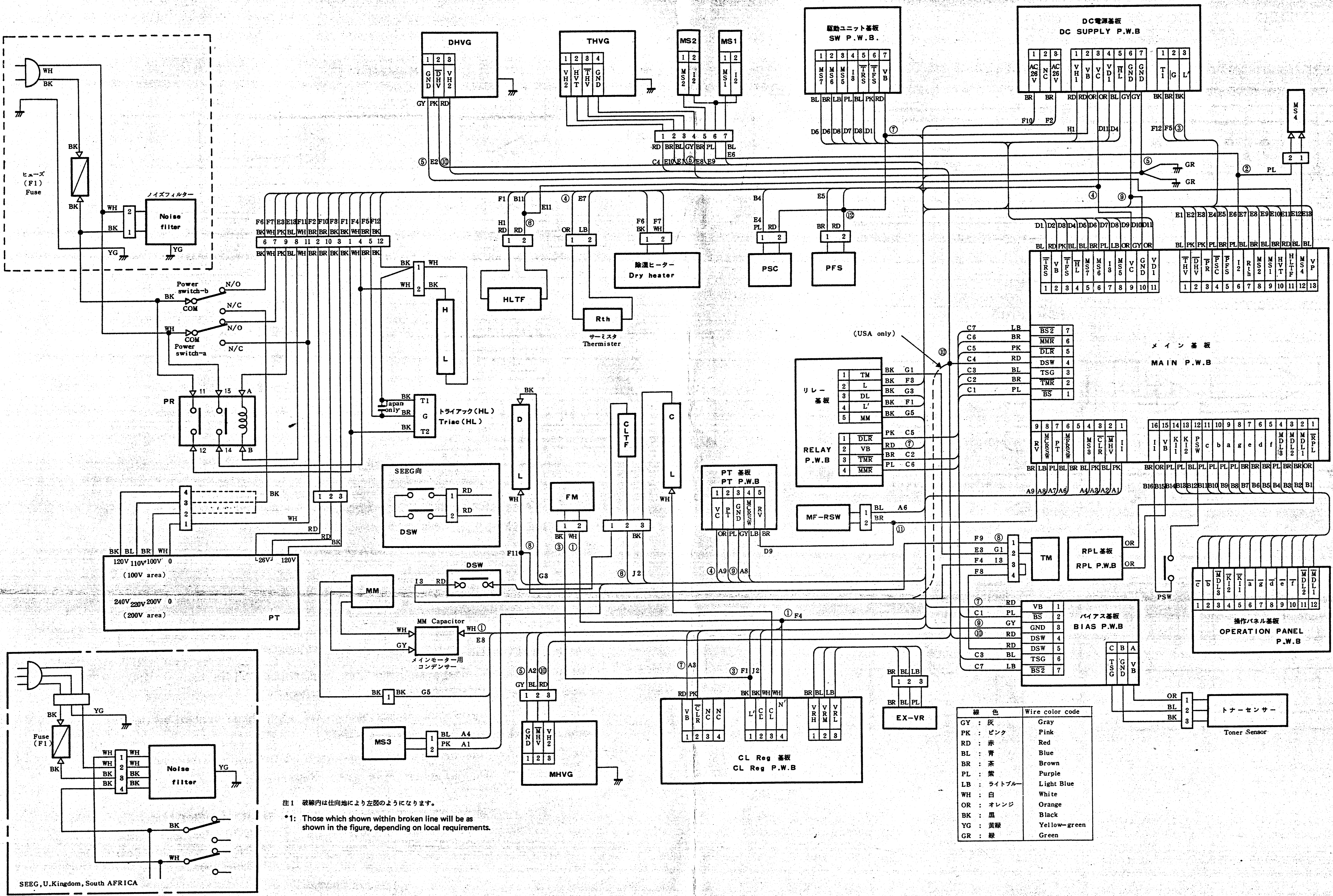
注 3. 高圧ユニットトラブル“C2”については、空転タイムチャート参照のこと。

*1: Since THVG is off with "PT=0" of "2n+1 cycle" in the multicopy mode, it actuates with "PT=0" of the 2n-th cycle (cross marked). Where "n" represents copy number.

*2: For the misfeed timing, refer to "single copy timing".

*3: For the high voltage source trouble status "C2", refer to "Preliminary cycle timings".

20〕実体配線図
20〕ACTUAL WIRING CHART


DHVG
THVG
MS2
MS1
駆動ユニット基板
SW P.W.B.
DC電源基板
DC SUPPLY P.W.B
MS4
ヒューズ
(F1)
Fuse
ノイズフィルター
Noise filter
Power switch-b
Power switch-a
COM
N/O
N/C
PR
HLTF
除湿ヒーター
Dry heater
Rth
サーミスタ
Thermister
PSC
PFS
H
L
Japan only
トライアック(HL)
Triac(HL)
SEEG向
DSW
D
L
CLTF
C
L
FM
PT 基板
PT P.W.B
リレー基板
RELAY P.W.B
(USA only)
メイン基板
MAIN P.W.B
MF-RSW
TM
RPL基板
RPL P.W.B
PSW
120V 110V 100V 0
(100V area)
240V 220V 200V 0
(200V area)
PT
MM
MM Capacitor
メインモーター用コンデンサー
バイアス基板
BIAS P.W.B
操作パネル基板
OPERATION PANEL P.W.B
MS3
MHVG
CL Reg 基板
CL Reg P.W.B
EX-VR
トナーセンサー
Toner Sensor
Fuse (F1)
SEEG, U.Kingdom, South AFRICA

線　色	Wire color code
GY : 灰	Gray
PK : ピンク	Pink
RD : 赤	Red
BL : 青	Blue
BR : 茶	Brown
PL : 紫	Purple
LB : ライトブルー	Light Blue
WH : 白	White
OR : オレンジ	Orange
BK : 黒	Black
YG : 黄緑	Yellow-green
GR : 緑	Green

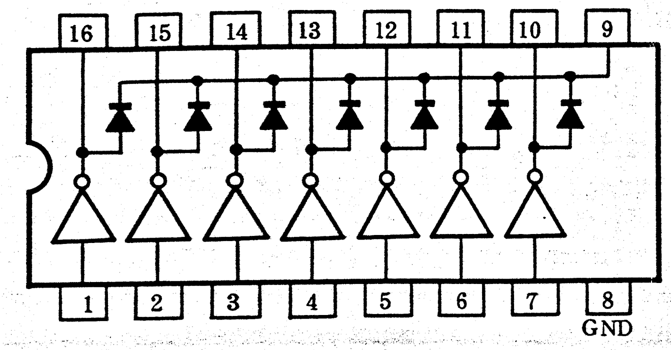
注1　破線内は仕向地により左図のようになります。

*1: Those which shown within broken line will be as shown in the figure, depending on local requirements.

〔21〕IC内部論理

〔21〕IC INTERNAL LOGIC

(M54526P)


COM
16
15
14
13
12
11
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9
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2
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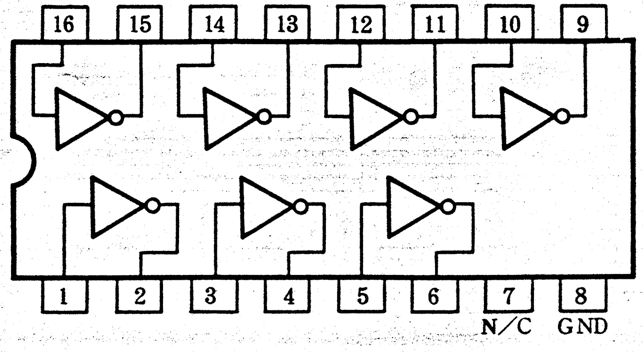
6
7
8
GND

(M54514P)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7
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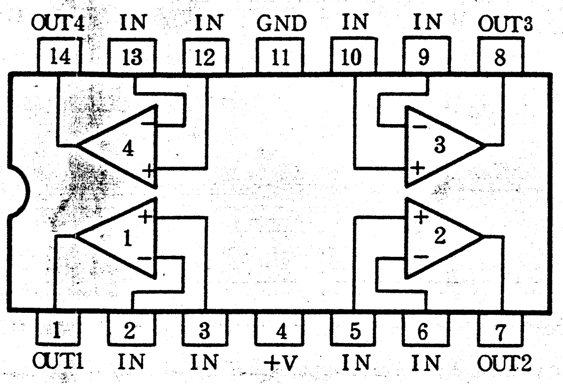
N/C
GND

(μPC324C)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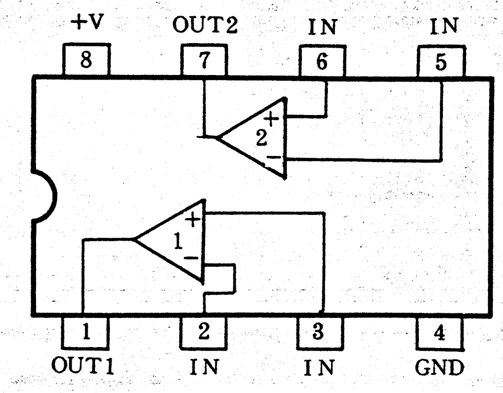
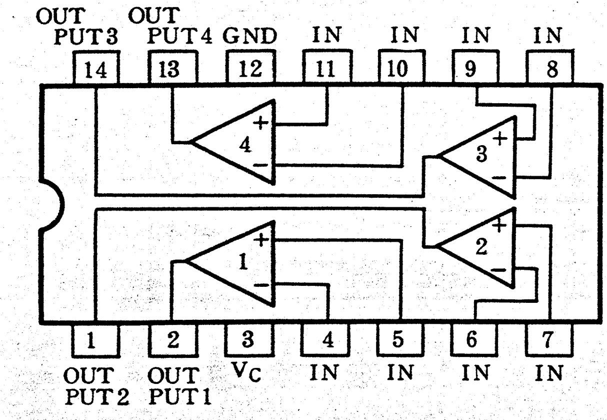
GND
IN
IN
OUT3
14
13
12
11
10
9
8
4
3
1
2
1
2
3
4
5
6
7
OUT1
IN
IN
+V
IN
IN
OUT2

(NJM2904D)


+V
OUT2
IN
IN
8
7
6
5
2
1
1
2
3
4
OUT1
IN
IN
GND

(NJM2901N, μPC339C)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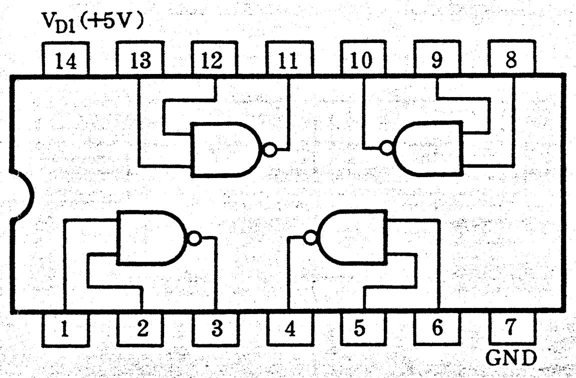
OUT PUT4
GND
IN
IN
IN
IN
14
13
12
11
10
9
8
4
3
1
2
1
2
3
4
5
6
7
OUT PUT2
OUT PUT1
Vc
IN
IN
IN
IN

(μPD4011B)


VD1(+5V)
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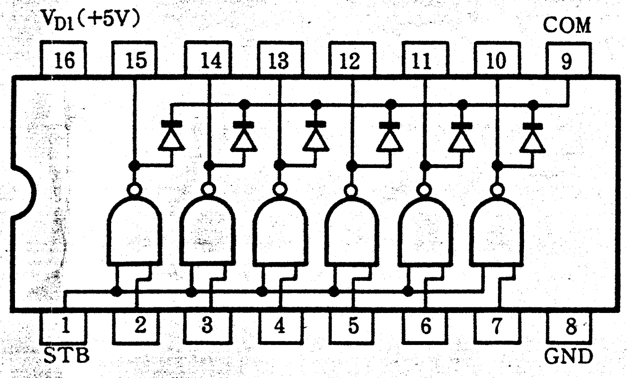
13
12
11
10
9
8
1
2
3
4
5
6
7
GND

(M54533P)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COM
16
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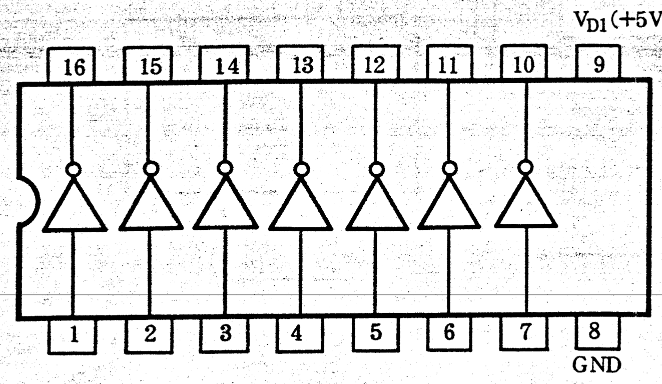
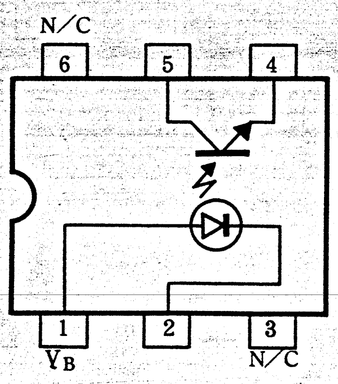
10
9
1
2
3
4
5
6
7
8
STB
GND

(M54537P)


VD1(+5V)
16
15
14
13
12
11
10
9
1
2
3
4
5
6
7
8
GND

(PC714U)


N/C
6
5
4
1
2
3
VB
N/C

○SF-755のサービス資料には、この資料以外にサービスマニュアルNo. 1〔機構部・電気部〕(00ZSF755ME/EL)、サービスマニュアルNo. 2〔調整・自己診断機能とシミュレーション機能・メンテナンス〕(00ZSF755AD/PM)、パーツガイド(00ZSF755PG/PL)等があります。合わせて御利用下さい。

○サービス資料を要求される場合は表紙に書いてあるコード名で要求下さい。

○Other than this Circuit Diagram, please refer to documents Service Manual No.1 [Mechanical section · Electrical section] (00ZSF755ME/EL), Service Manual No.2 [Adjustment · Self-diagnosis and Test functions · Maintenance] (00ZSF755AD/PM), Parts Guide (00ZSF755PG/PL) for SF-755.

○Please use 13 digits code described in the right hand corner of the front cover of the document, when you place an order.

For U.S. only-Use order codes provided in advertising literature.
Do not order from parts department.

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〒639-11 奈良県大和郡山市美濃庄町492
TEL (07435) 3−5521

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Reliability & Quality Control Dept.
Yamatokoriyama, Nara 639-11, Japan

1983年3月 Ⓢ

1983 March Printed in Japan Ⓢ

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XYD151

SHARP PARTS GUIDE

CODE:00ZSF755P/G-M

MODEL SF-755

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27 コピーランプレギュレーター基板ユニット (CL-Regulator PWB unit)
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90 ビス・ナット・ワッシャー (Hardware parts)

CPS

SHARP CORPORATION

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○ SF-755のサービス資料には、この資料以外にサービスマニュアルNo.1〔機構部・電気部〕，サービスマニュアルNo.2〔調整・自己診断機能とシミュレーション機能・メンテナンス〕，回路図集等があります。合せて御利用下さい。

○ Other than this Parts Guide, please refer to documents Service Manual No.1〔Mechanical section・Electrical section〕, Service Manual No.2〔Adjustment・Self-diagnosis and Test function・Maintenance〕, Circuit Diagram for SF-755.

○ Please use 13 digits code described in the right hand corner of the front cover of the document, when you place an order.

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CPS

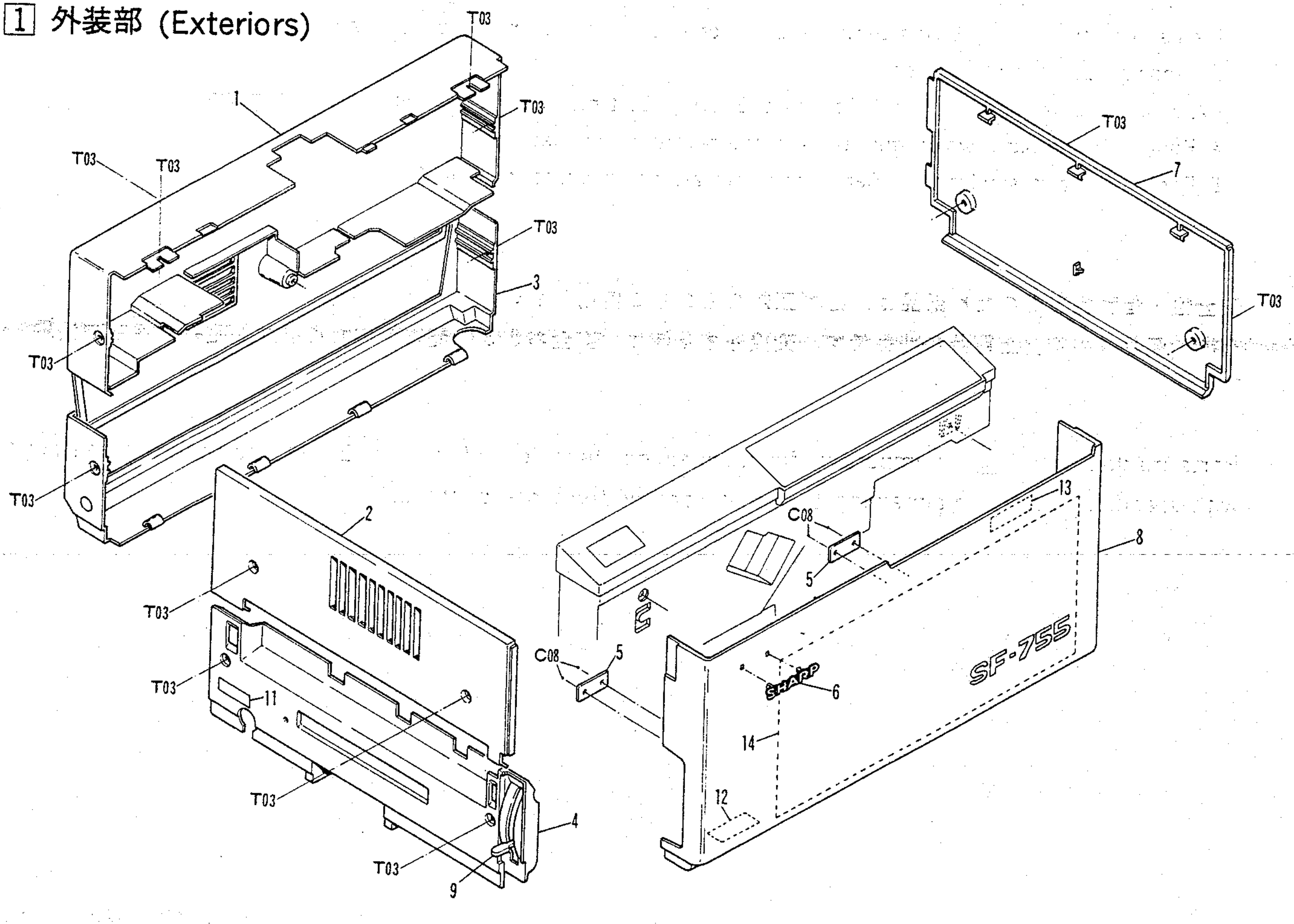
このパーツガイドは、データを産機のコンピュータより直接取り出し、電算写植システム(CPS：コンピュータ フォトタイプ システム)に乗せ、自動編集させ作ったものです。
Edition of this Parts Guide is made fully automatic by the computer phototype system (CPS) whose printout data are directly picked up from the Sharp's main comuputer bank.

SF-755

1 外装部 (Exteriors)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION	
		Ja	Ex				
1	CCAB−0395FC01	FQ	AW	N	D	ウシロキャビネットU	Rear Exterior unit(U)
2	CCAB−0397FC31	FB	AS	N	D	ヒダリキャビネット U	Left side exterior U(Export)
3	GCAB−0396FCZZ	ER	AQ	N	D	ウシロキャビネット L	Rear Exterior (L)
4	GCAB−0398FCZZ	ER	AQ	N	D	ヒダリキャビネット L	Left side Exterior (L)
	GCAB−0401FCZZ	ER	AQ	N	D	ヒダリキャビネットL	Left side Exterior(L) U.S.A,Canada,Australia
	GCAB−0402FCZZ	ER	AQ	N	D	ヒダリキャビネットL	Left side Exterior(L) SEEG,U.Kingdom
5	LPLTM1041FCZZ	DA	AA	N	C	ヒンジプレート	Cover hinge plate
6	HBDGD0028FCZZ	DF	AD	N	D	シャープバッヂ	SHARP badge
7	GCAB−0399FCZZ	ES	AQ	N	D	ミギキャビネット	Right side Exterior
8	CCAB−0394FC01	FZ	AY	N	D	マエキャビネット AS	Front Exterior
	CCAB−0394FC02		AY	N	D	マエキャビネット AS	Front Exterior (U.S.A,Canada,Australia)
	CCAB−0394FC03		AY	N	D	マエキャビネット AS	Front Exterior (SEEG,U.Kingdom)
9	MLEVP0205FCZZ	DH	AD		C	レバー トッテ	Lever
11	TCAUH0687FCZZ	DB	AA	N	C	サービス チュウイ ラベル	Service caution label (Canada)
	TCAUH0684FCZZ	DB	AA	N	C	サービス チュウイ ラベル	Service caution label (U.S.A,Australia)
	TCAUA0766FCZZ	DB	AB	N	C	サービス チュウイ ラベル	Service caution label (U.Kingdom)
	TCAUA0770FCZZ	DC	AB	N	C	サービス チュウイ ラベル	Service caution label (SEEG)
12	TLABJ0572FCZZ	DC	AB		C	ヒューズ ラベル	Fuse label (120V U.S.A,Canada)
13	TLABZ0493FCZZ	DA	AA		C	ホショウラベル (U.S.A)	Warrant label (U.S.A)
14	TLABH0872FCZZ	EC	AL	N	C	ホシュ セツメイ ラベル	Label (Japan)
	TLABH0873FCZZ	EP	AP	N	C	ホシュ セツメイ ラベル	Label (U.Kingdom,Australia)
	TLABH0874FCZZ	EP	AP	N	C	ホシュ セツメイ ラベル	Label (Canada,SEEG)
	TLABH0875FCZZ	EP	AP	N	C	ホシュ セツメイ ラベル	Label (U.S.A)

1 外装部 (Exteriors)



補修部品のランク付

市場における補修部品の在庫管理が、適正に運営出来る手助けとなることを、目的とします。

Aランク：取替頻度が比較的多く、在庫を必要とするパーツ。
Bランク：取替頻度は比較的少ないが、在庫を必要とするパーツ。
Cランク：取替頻度はほとんどないと思われるパーツ。
Dランク：取替頻度はほとんどないが新品再生に必要なパーツ。
Eランク：ユニットパーツ。サービス効率アップの為、在庫する事を推奨するパーツ。
Sランク：消耗品

但し、複写機のパーツについては、同一パーツ名であっても、下記パーツは、使用箇所の相違により、A・Bランク分けします。

パーツ名：金属性のギャー、スプロケット、ベアリング、ゴム製のベルト、スプリングクラッチ機構
Aランク：常に回転しているか、負荷がかかっている箇所に使用され、回転回数が増える事により、変形又は摩耗が生じその性能が発揮出来なくなるパーツ。
Bランク：回転部分に使用されているが、摩耗度が比較的少ないパーツ。

DEFINITION

The definition of each Rank is as follows and also noted in the list.

A ; Parts necessary to be stocked as High usage parts.
B ; Parts necessary to be stocked as Standard usage parts.
C ; Low usage parts.
D ; Parts necessary for refurbish.
E ; Unit parts recommended to be stocked for efficient after sales service.
Please note that the lead time for the said parts may be longer than normal parts.
S ; Consumable parts.

Please note that the following parts used in Copier under the same description are classified into A or B Rank depending upon the place used.

Example ; Gear made of Metal, Sprocket, Bearing, Belt made of Rubber, Spring clutch mechanism.
A Rank ; The parts which may be with the revolution or loading.
B Rank ; Parts similar to A Rank parts, but are not included in Rank A.

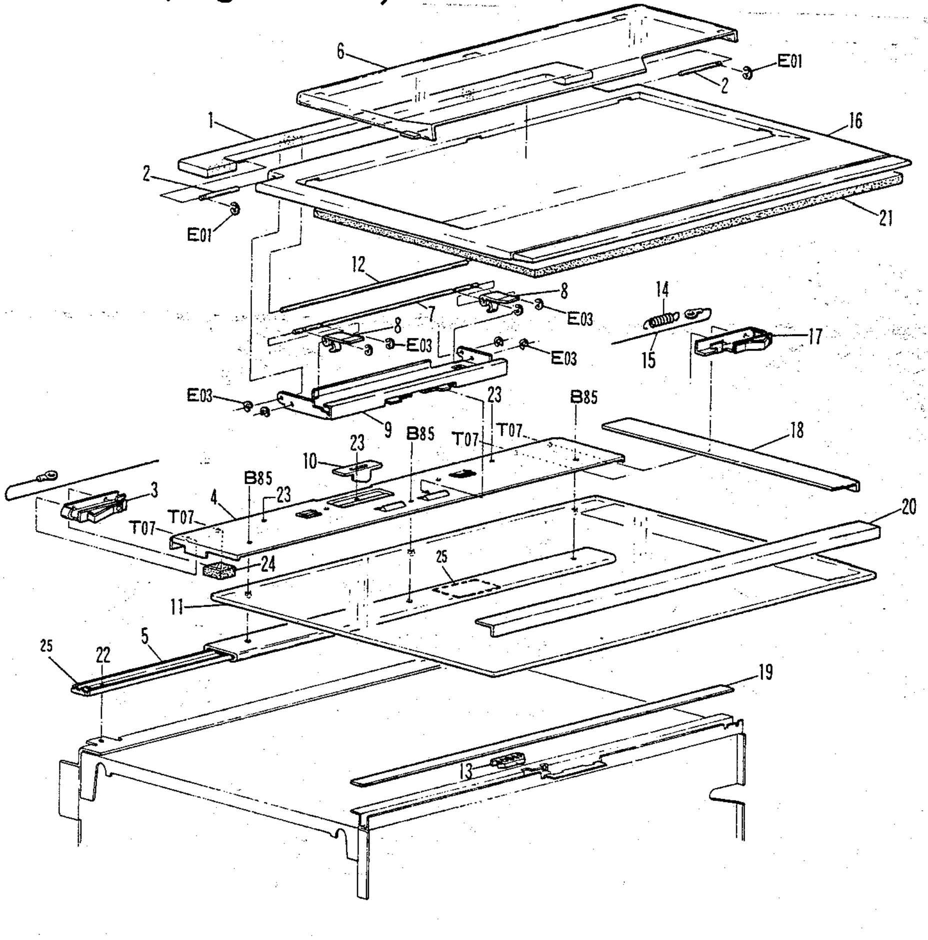
安全性・信頼性確保のため部品は、必ず正規のものをご使用下さい。
⚠印の商品は、安全上重要な部品です。交換をする時は、安全および性能維持のため必ず指定の部品をご使用下さい。

Parts marked with "⚠" is important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

2 オリジナル テーブル (Original table)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION	
		Ja	Ex				
1	PCOVP0394FCZZ	DY	AK	N	C	OR カバー	Original cover
2	NSFTZ0480FCZZ	DF	AD	N	C	OC ヒンジシャフトL	OC hinge shaft(L)
3	CANGT0949FC01	DM	AF	N	C	ワイヤコテイアングルAAS	Wire fixing plate (A)
4	CPLTM1038FC01	EN	AP	N	C	ガラスシジバンAS	Glass holding plate
5	MSLiF0027FCZZ	FX	AX	N	C	アキュライド	Slider
	MSLiF0029FCZZ	FV	AX	N	C	アキュライド	Slider (SEEG only)
6	CHLDZ0439FC01	FJ	AU	N	C	ORホルダー	Original holder (Japan)
	LHLDZ0439FCZZ		AQ	N	C	OR ホルダー	Original holder (Export)
7	NSFTZ0485FCZZ	DS	AG	N	C	ストッパージク	Stopper shaft
8	LSTPP0096FCZZ	DB	AB	N	C	ヒンジストッパー	Stopper
9	LPLTM1081FCZZ	DY	AK	N	C	OC ヒンジプレート	Original cover hinge plate
10	LPLTM1039FCZZ	DB	AB	N	C	PSチョウセイバン	PS Adjusting plate
11	PGLSP0032FCZZ	GK	BB	N	D	テーブルガラス	Table glass
12	NSFTZ0487FCZZ	DK	AE	N	C	OC ヒンジシャフトN	Original cover hinge shaft(N)
13	PSPAZ0177FCZZ	DB	AB	N	C	TB スペーサー	TB spacer
14	MSPRT0140FCZZ	DB	AA		B	エアーガイドバネ	Air guide spring
15	PWiR−0077FCZZ	EC	AL	N	C	テーブルワイヤー	Table wire
16	CCOVH0129FC31	HF		N	D	OC カバー	OC Cover (Japan)
	CCOVH0129FC32		BF	N	D	OC カバー	OC Cover (Except U.S.A,Canada)
	CCOVH0129FC34		BF	N	D	OC カバー	OC Cover (U.S.A,Canada)
17	CANGT0950FC01	DM	AF	N	C	ワイヤコテイアングルBAS	Wire fixing plate (B)
18	CGiDH0452FC01	EB	AL	N	C	ガイド	Guide (Japan only)
	CGiDH0452FC02	EB	AL	N	C	ガイド	Guide (Export AB series)
	CGiDH0452FC03	DZ	AK	N	C	ガイド	Guide (Export Inch series)
19	PSHEZ0587FCZZ	DY	AK	N	C	TBスライダー	TB slider
20	CGiDH0451FC01	ED	AM	N	C	ORガイド	Original guide (AB series)
	CGiDH0451FC02	EC	AL	N	C	ORガイド	Original guide (Inch series)
21	PSHEZ0564FCZZ	FQ	AW		C	OCマット	OC Sheet
22	LX−BZ0203FCZZ	DA	AA		C	ビス	Screw
23	LX−BZ0183FCZZ	DA	AA	N	C	ビス	Screw
24	PCUSF0105FCZZ	DB	AB	N	C	モルト	Cushion
25	LSTPF0078FCZZ		AB	N	C	MBストッパー	MB stopper(SEEG)

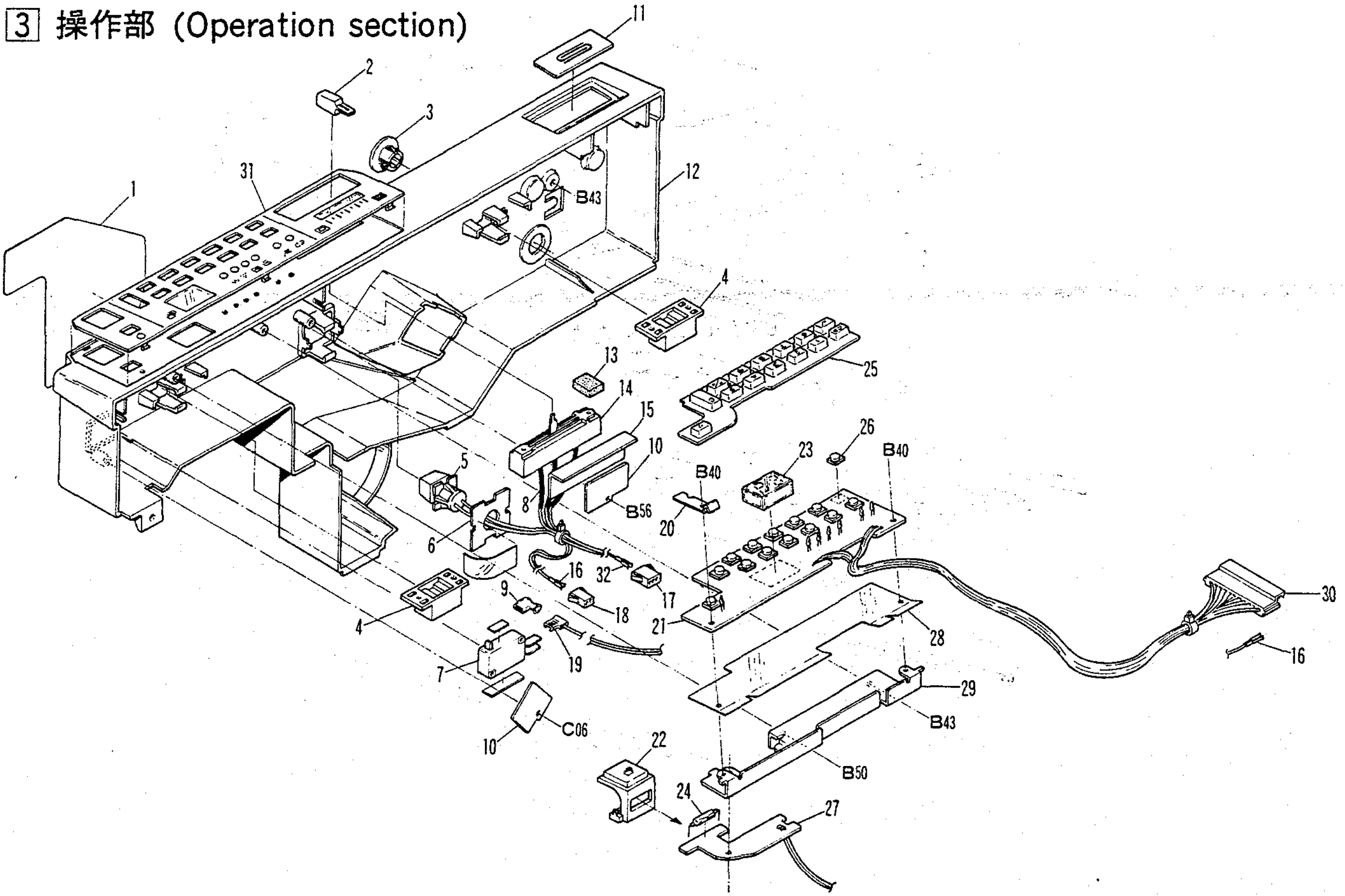
2 オリジナル テーブル (Original table)



3 操作部 (Operation section)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION	
		Ja	Ex				
1	TLABH0869FCZZ	DR	AG	N	C	ホシュチュウイラベル(コクナイ)	Caution label (Japan)
	TLABH0870FCZZ		AG	N	C	ホシュチュウイラベル	Caution label(E)
	TLABH0871FCZZ		AG	N	C	ホシュチュウイラベル	Caution label (E,F,G,S)
2	JKNBP0064FCZZ	DT	AG	N	C	EXノブ	EX Knob
3	PCOVP0395FCZZ	DF	AD	N	C	EXカバー	EX Cover
4	PMAGT0015FCZZ	DH	AD	N	C	MGキャッチ	Magnet catch (10P)
5	QSW-P0149FCZZ	DH	AD	N	B	プッシュスイッチ	Push switch
6	LANGT0736FCZZ	DB	AB	N	C	リセットスイッチ	Push switch angle
7	QSW-M0150FCZZ	DS	AG	N	A	マイクロスイッチ	Microswitch
8	PTUBP0010FCZZ	DA	AA		C	シューシュクチューブ	Tube
9	PHOG-0020FCZZ	DA	AA		C	ホルダー	Holder
10	LPLTM1084FCZZ	DA	AA	N	C	スイッチトリツケバン	Switch plate
11	PSHEM0593FCZZ	DJ	AE	N	C	MGシート	MG sheet
12	CPNLC0117FC01	FR	AW	N	D	コントロール パネル	Control panel
13	PMLT-0301FCZZ	DA	AA	N	C	シャコウヨウモルト	Shield cushion
14	RVR-Q0003FCZZ	DU	AG	N	A	ボリウム	Variable resistor
15	PSHEP0613FCZZ	DD	AC	N	C	シャコウヨウマイラー	Shield sheet
16	QPLGN0018FCZZ	DA	AA		C	プラグ	Plug
17	PHOG-0126FCZZ	DB	AB		C	3Pソケットホルダー	3P socket holder
18	PHOG-0125FCZZ	DB	AB		C	2Pプラグホルダー	2P plug holder
19	QTiPH0020FCZZ	DA	AA		C	タンシ	Terminal
20	LANGT0966FCZZ	DD	AC	N	C	Cパネルホジヨウアングル	Control panel angle
21	CPWBE0278FC51	HV	BK	N	E	ソウサキバンユニット	Operation PWB unit
22	CBTN-0042FC01	DL	AE	N	C	プリントボタンAS	Print button
23	VHPGL3HD7//-1	DD	AC	N	B	フォトトランジスター	Photo transistor
24	RLMPM5490QCN1	DH	AE		A	ランプ	Lamp
25	JBTN-0043FCZZ	EC	AL	N	C	キーボタン M	Key button (M)
26	QSW-P0208FCZZ	DC	AB	N	B	プッシュスイッチ	Push switch
27	CPWBE0279FC51	EA	AK	N	E	RPLキバンユニット	RPL PWB unit
28	PSHEP0599FCZZ	DD	AC	N	C	ゼツエンシート	Insulator sheet
29	LANGT0959FCZZ	DK	AE	N	C	キバンアングル	PWB angle
30	PHOG-0137FCZZ	DB	AB		C	16Pソケット ホルダー	16P socket holder
31	HiNDP0119FCZZ	FE	AS	N	D	インジケーター	Indicator panel
32	QPLGN0026FCZZ	DA	AA		C	プラグ	Plug
	ユニット (Unit)						
901	CPNLC0117FC51	NC	BS	N	E	Cパネルユニット	Control panel unit
	CPNLC0117FC52	NC	BS	N	E	Cパネルユニット	Control panel unit
	CPNLC0117FC53	NC	BS	N	E	Cパネルユニット	Control panel unit

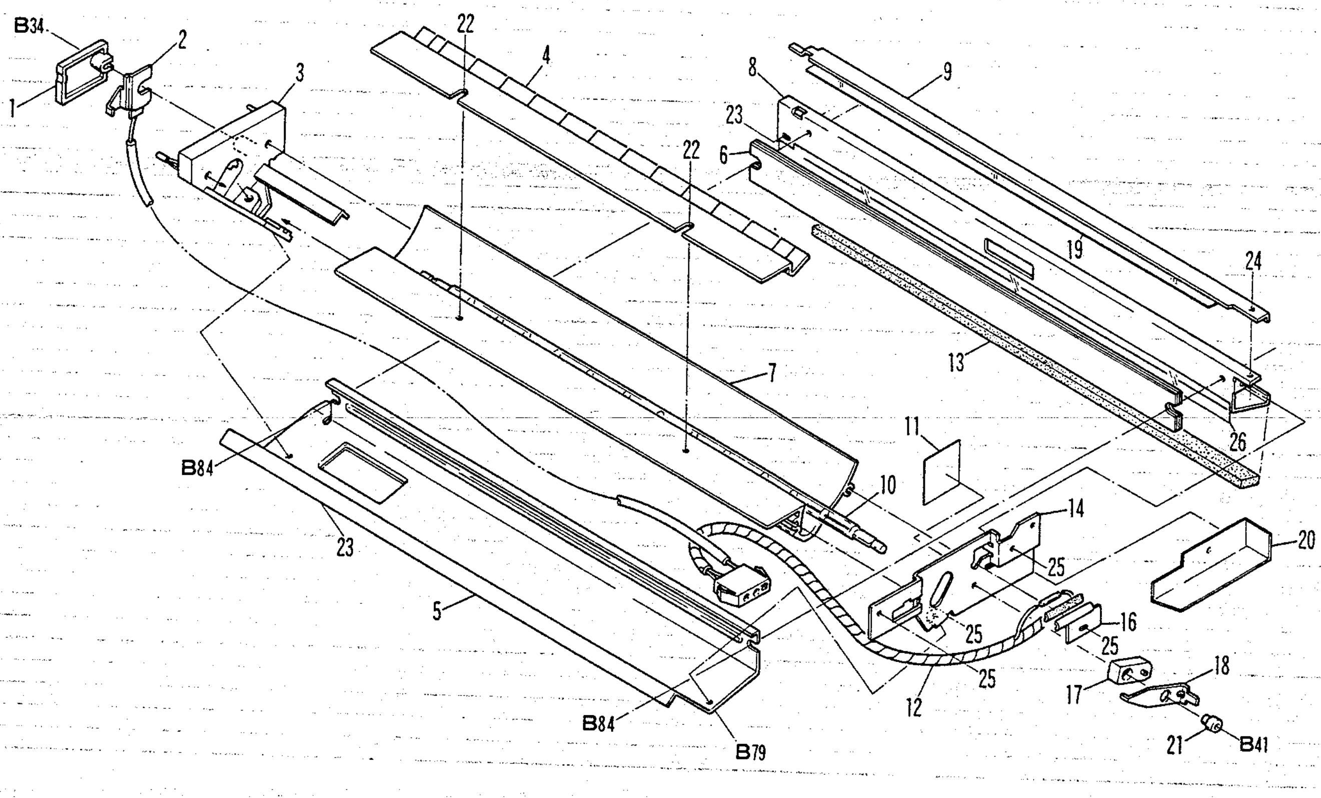
3 操作部 (Operation section)



4 光学ユニット (Optical unit)

NO.	PARTS CODE	PRICE RANK Ja	PRICE RANK Ex	NEW MARK	PART RANK	DESCRIPTION	
1	LDAiU0120FCZZ	DD	AC	N	C	セッテンダイ F	Base plate F
2	QSLPA0058FCZZ	DF	AD	N	C	ランプセッテン R	Lamp terminal R
3	LFRM−0203FCZZ	DV	AH	N	C	SLソクバン R	Lens side frame (R)
4	LPLTM1055FCZZ	DP	AF	N	C	チョウコウバン	Control plate
5	LANGF0952FCZZ	DX	AH	N	C	SLホジバンB	Lens angle (B)
6	PLNS−0016FCZZ	RH	BU	N	C	ファイバーオプティクスレンズ	Fiber optics lens
7	PREFL0056FCZZ	FH	AT	N	B	レフレクター	Reflector
8	CANGF0951FC01	EA	AL	N	C	SLホジバン AS	Lens angle (A)
9	LFiX−0123FCZZ	AK	AE	N	D	フィルターオサエ	Filter fixing plate
⚠ 10	RLMPU0190FCZZ	GQ	BC		A	ランプ	Lamp (100V series/50Hz,60Hz)
⚠	RLMPU0192FCZZ	HH	BF	N	A	ランプ	Lamp (200V series/50Hz,60Hz)
⚠	RLMPU0193FCZZ	HH	BF	N	A	ランプ	Lamp (100V series/50Hz,60Hz)
11	PSHEP0616FCZZ	DB	AB	N	C	シャフウシート C	Sheet C
⚠ 12	CFS−T0062FC31	DX	AH	N	A	CLオンドヒューズ	CL temperature fuse
⚠	CFS−T0062FC32		AK	N	A	CLオンドヒューズ	CL temperature fuse (U.S.A,Canada)
13	PMLT−0303FCZZ	DA	AA	N	C	シャフウモルト	Cushion
14	LFRM−0202FCZZ	DS	AG	N	C	SLソクバンF	Lens frame (F)
15	————						
16	CFiX−0126FC01	EA	AK	N	C	オンドヒューズオサエバン	Temperature fuse fixing plate
17	PGiST0024FCZZ	DL	AE	N	C	ランプバネダイ	Lamp spring base
18	MSPRP0475FCZZ	DD	AC	N	B	ランプバネ F	Lamp spring F
19	PFiLW0030FCZZ	DK	AE		C	フィルター	Filter
20	PSHEP0612FCZZ	DJ	AE	N	C	SLマイラーF	Lens sheet F
21	PGiSC0023FCZZ	DB	AB		C	ゼツエン ワッシャ	Insulation washer
22	LX−BZ0073FCZZ	DA	AA		C	ビス	Screw
23	LX−BZ0181FCZZ	DA	AA	N	C	ビス	Screw
24	LX−BZ0178FCZZ	DA	AA	N	C	ビス	Screw
25	LX−BZ0102FCZZ	DA	AA		C	ビス	Screw
26	PSHEP0644FCZZ	DD	AC	N	C	SLシャフウマイラー	SL sheet

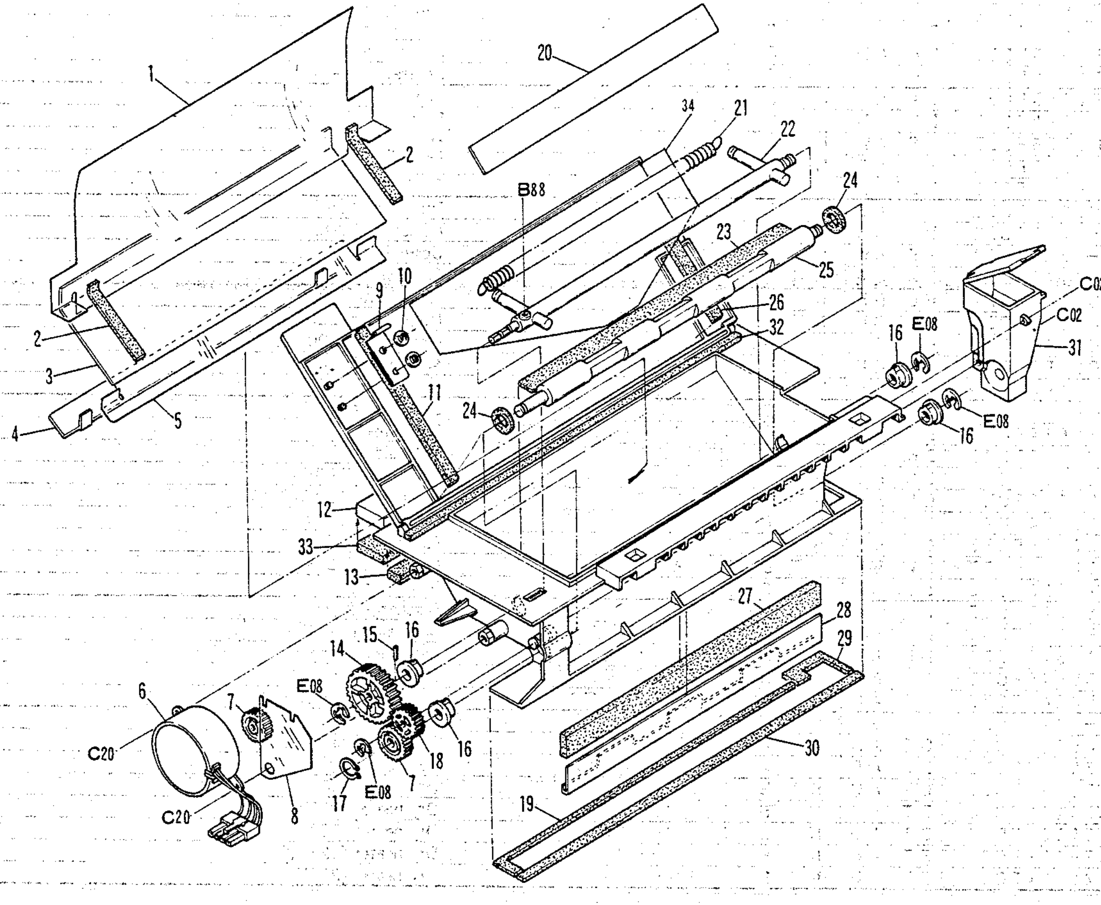
4 光学ユニット (Optical unit)



5 トナーボックス (Toner box)

	NO.	PARTS CODE	PRICE RANK Ja	PRICE RANK Ex	NEW MARK	PART RANK	DESCRIPTION	
	1	PSHEP0694FCZZ	DJ	AE	N	C	トナー シャヘイバン D	Toner shild plate D
	2	PMLT−0309FCZZ	DA	AA	N	C	トナボックスヨウモルトG	Toner box cushion (G)
	3	LPLTM1095FCZZ	DS	AG	N	C	トナーボックスホジョバン	Toner box holder plate
	4	LPLTM1094FCZZ	DK	AE	N	C	トナーボックスホジョバンA	Toner box holder plate (A)
	5	PSHEP0631FCZZ	DF	AD	N	C	トナーボックスヨウシート	Toner box sheet
⚠	6	RMŌTE0189FCZZ	FH	AT	N	B	トナーモーター	Toner moter (50Hz)
⚠		RMŌTE0196FCZZ	FH	AT	N	B	トナーモーター	Toner moter (60Hz)
	7	NGERH0117FCZZ	DD	AC		C	トナーレンケツ ギヤ	Toner joint gear
	8	PSHEP0621FCZZ	DF	AD	N	C	ギヤーホゴシート	Gear protect sheet
	9	MSPRP0480FCZZ	DE	AC		B	トナーフタヨウバネ	Toner cover spring
	10	LX−WZ0064FCZZ	DA	AA		C	ワッシャ	Washer
	11	PMLT−0310FCZZ	DA	AA	N	C	トナーボックスヨウモルトH	Toner box cushion (H)
	12	CBŌXZ0052FC01	FQ	AW	N	C	トナーボックス AS	Toner box
	13	PMLT−0312FCZZ	DB	AB	N	C	トナーボックスヨウモルトJ	Toner box cushion (J)
	14	NGERH0049FCZZ	DH	AD		C	DVギヤー36T	Develop gear (36T)
	15	LPiNS0024FCZZ	DB	AB		C	ヘイコウピン B	Pin B
	16	NBRGC0140FCZZ	DH	AD		B	ベアリング	Bearing
	17	PRNGP0025FCZZ	DA	AA	N	C	Vリング	V ring
	18	NGERH0118FCZZ	DD	AC		C	アイドル ギヤ	Idle gear
	19	PMLT−0295FCZZ	DB	AB	N	C	トナーボックスヨウモルトC	Toner box cushion (C)
	20	LPLTM1054FCZZ	DE	AC	N	C	トナーシヤヘイバンC	Toner plate (C)
	21	MSPRT0636FCZZ	DE	AC	N	B	トナーカクハンバネA	Toner stirring spring (A)
	22	NSFTZ0464FCZZ	EB	AL	N	C	カクハンヨウジク	Stirring shaft
	23	PMLT−0305FCZZ	DB	AB	N	C	トナーボックスモルトF	Toner box cushion (F)
	24	PMLT−0304FCZZ	DA	AA	N	C	トナーボックスモルトE	Toner box cushion (E)
	25	NSFTZ0463FCZZ	EG	AM	N	C	トナージク	Toner shaft
	26	PMLT−0311FCZZ	DA	AA	N	C	トナーボックスヨウモルトI	Toner box cushion (I)
	27	PMLT−0296FCZZ	DC	AC	N	C	トナーボクスヨウモルトD	Toner boxcushion (D)
	28	LPLTM1091FCZZ	DN	AF	N	C	トナーカキオトシA−2	Toner plate
	29	PMLT−0294FCZZ	DB	AB	N	C	トナーボックスウモルトB	Toner box cushion (B)
	30	PMLT−0293FCZZ	DB	AB	N	C	トナーボックスヨウモルトA	Toner box cushion (A)
	31	PPiPP0055FCZZ	DJ	AE	N	C	DVチョウセイグチパイプ	Pipe
	32	PMLT−0323FCZZ	DE	AC	N	C	トナーBOXヨウモルト K	Cushion (K)
	33	PMLT−0324FCZZ	DE	AC	N	C	トナーBOXヨウモルト L	Cushion (L)
	34	PSHEP0695FCZZ	DE	AC	N	C	トナー シャヘイバン E	Toner shild plate E

5 トナーボックス (Toner box)



6 上フレーム (Upper frame)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION	
		Ja	Ex				
1	PSHEG0315FCZZ	DB	AB		C	ゼツエンスペーサーA	Insulation spacer A
2	PRDAR0021FCZZ	DW	AH	N	C	デンゲンキホルダー	Heat sink
3	MSPRC0652FCZZ	EW	AR	N	B	バランサー	Balancer spring
4	PSHEP0598FCZZ	DS	AG	N	C	メインキバンゼツエシート	Main PWB Insulation sheet
5	PCŌVW0399FCZZ	DF	AD	N	C	メモリーキバンカバー	Memory PWB cover
6	CPWBN0284FC51	TB	BW	N	E	メインキバン	Main PWB
7	CGiDH0454FC01	EU	AQ	N	C	ペーパーガイドA AS	Paper guide A assy
8	PSPAZ1043CCZZ	DB	AB		C	ブッシュ	Grommet
9	PSHEG0316FCZZ	DB	AB		C	ゼツエンスペーサーB	Insulator spacer (B)
11	LSUPP0002FCZZ	DD	AC		C	サポーター	Supporter
12	LX-WZ0113FCZZ	DB	AB	N	C	ワッシャ	Washer
13	LX-NZ0032FCZZ	DB	AA		C	ナット	Nut
15	QEARP0004FCZZ	DD	AC	N	B	DRアースバン	Dram ground plate
16	NBRGC0133FCZZ	DD	AC		B	PFジクウケ	Bearing
17	NGERH0121FCZZ	DS	AG		C	70Tギヤ	Gear (70T)
18	LBSHC0141FCZZ	DB	AB	N	C	ブッシュ	Grommet
19	CFRM-0205FC01	FS	AW	N	C	ウエフレームRユニット(J)	Upper frame R unit (Japan)
20	LSUPP0007FCZZ	DL	AE		C	キバンサポーター	Supporter
⚠ 21	PHED-0009FCZZ	GC	AZ	N	B	ギヤヘッド	Gear head (50Hz)
⚠	PHED-0010FCZZ	GC	AZ	N	B	ギヤヘッド	Gear head (60Hz)
22	LPLTM1088FCZZ	DG	AD	N	C	シャフウバン A	Shield plate A
23	PSHEP0617FCZZ	DF	AD	N	C	ドラムシャフウシート	Drum shield sheet
24	CSFTZ0461FC01	FL	AV	N	C	DRジクーH	DR shaft H
⚠ 25	RC-FZ0130FCZZ	EW	AQ		C	コンデンサー	Capacitor (100V/50Hz)
⚠	RC-FZ0131FCZZ	ES	AQ		C	コンデンサー	Capacitor (100V/60Hz)
⚠	RC-FZ0106FCZZ	EG	AN	N	C	コンデンサー	Capacitor (120V/60Hz)
⚠	RC-FZ0108FCZZ	EW	AR	N	C	コンデンサー	Capacitor (120V/50Hz)
⚠	RC-FZ0109FCZZ	ES	AQ	N	C	コンデンサー	Capacitor (240V/50Hz,220V/60Hz)
⚠	RC-FZ0104FCZZ	EM	AP		C	コンデンサー	Capacitor (110V/50Hz)
⚠	RC-FZ0105FCZZ	EG	AN		C	コンデンサー	Capacitor (110V/60Hz)
⚠	RC-FZ0107FCZZ	EW	AR		C	コンデンサー	Capacitor (200V/50Hz)
⚠	RC-FZ0183FCZZ	ET	AQ		C	コンデンサー	Capacitor (127V/60Hz)
26	LX-WZ0017FCZZ	DA	AA		C	ワッシャ	Washer
27	CGERH0157FC01	DT	AG	N	C	DVギヤ12マルAS	DV Gear
28	PRNGP0023FCZZ	DA	AA	N	C	グリップリングマル7	Grip ring ϕ7
29	CDRM-0011FC51	MY	BR	N	B	DR ユニット	Drum unit
30	PGiDH0465FCZZ	DU	AG	N	C	エアーガイド	Air guide
31	PMLT-0316FCZZ	DA	AA	N	C	シャフウバンモルト C	Cushion C
32	LSTYM0047FCZZ	DY	AH		C	ステー	Stay
33	LPLTM1089FCZZ	DU	AG	N	C	シャフウバン B	Shield plate B
35	LANGT0962FCZZ	DF	AD	N	C	ボイドアングル	Void angle
36	PSHEP0632FCZZ	DJ	AE	N	C	マエフレシャコウマイラー	Front frame shield sheet
37	PSHEP0615FCZZ	DH	AD	N	C	シャフウシート B	Shield sheet B
38	MLEVP0199FCZZ	DH	AD		C	ブンリレバー A	Separator lever A
39	PSHEP0653FCZZ	DA	AA	N	C	シート	Sheet
41	LPLTM1090FCZZ	DF	AD	N	C	シャフウバン C	Shild plate C
43	LPLTM1056FCZZ	FS	AW	N	C	フレームレンケツバン	Frame joint plate
44	CPWBF0281FC51	FC	AS	N	E	PT キバンユニット	PT PWB unit
45	LPiNS0024FCZZ	DB	AB		C	ヘイコウピン B	Pin B
46	JHNDP0037FCZZ	DL	AE		C	DRカイテン	Drum Rotation
47	PSPAF0005FCZZ	DB	AA		C	チョセイワッシャB	Adjusting Washer
48	CFRM-0204FC01	FR	AW	N	C	ウエフレームFAS	Upper frame F
49	LBSHC0140FCZZ	DA	AA	N	C	ブッシュ L-34	Grommet
⚠ 50	RMŌTC0187FCZZ	HU	BK	N	B	メインモーター	Main motor (100V)
⚠	RMŌTC0190FCZZ	HU	BK	N	B	メインモーター	Main motor (220V)
⚠	RMŌTC0191FCZZ	HU	BK		B	メインモーター	Main moter (200V,220V)
⚠	RMŌTC0192FCZZ	HU	BK	N	B	メインモーター	Main moter (240V)
⚠	RMŌTC0198FCZZ	HV	BK		B	メインモーター	Main moter (127V)
51	PTME-0073FCZZ	DQ	AF	N	C	ブンリツメ B	Separator pawl B
52	PSHEP0614FCZZ	DF	AD	N	C	シャフウシート A	Shild sheet
53	PGiDH0462FCZZ	DM	AF	N	C	MCガイドーH	MC guide H
⚠ 54	RMŌTE0188FCZZ	GQ	BC	N	B	ファンモーター	Fan Motor (100V)
⚠	RMŌTE0193FCZZ	GQ	BC	N	B	ファンモーター	Fan moter (110V,120V)
⚠	RMŌTE0194FCZZ	GR	BC	N	B	ファンモーター	Fan motor (220V)
⚠	RMŌTE0195FCZZ	GR	BC	N	B	ファンモーター	Fan moter (240V)
⚠	RMŌTE0199FCZZ	GW	BD		B	ファンモーター	Fan moter (127V)
55	PBARM0028FCZZ	EG	AN		E	ブンリバー	Separator bar
56	PBRSS0027FCZZ	EC	AL	N	B	ジョウデンブラシ	Discharge brush
57	CLEVF0248FC01	DQ	AF	N	C	ブンリレバーB AS	Separator lever B
58	MSPRT0571FCZZ	DB	AB	N	B	ブンリフッキバネ	Separator spring
59	MSPRC0640FCZZ	DB	AB	N	B	オープンスイッチヨウバネ	Open switch spring
60	MLEVP0247FCZZ	DC	AC	N	C	オープンスイッチアクチエータ	Open switch actuator
61	PTME-0072FCZZ	DQ	AF	N	C	ブンリツメ A	Separator pawl A
63	MSPRC0621FCZZ	DF	AD	N	A	DRクラッチスプリング	DR clutch spring
64	LBŌSZ0409FCZZ	DQ	AF		A	DRクラッチボス	DR clutch boss
⚠ 65	CR-WZ0181FC02	ET	AQ	N	B	ジョシツヒーター	Dry heater (100V)
⚠	CR-WZ0182FC01	ET	AQ	N	B	ジョシツヒーター	Dry heater (110V)
⚠	CR-WZ0183FC01	ET	AQ	N	B	ジョシツヒーター	Dry heater (120V)
⚠	CR-WZ0199FC01	ET	AQ	N	B	ジョシツヒーター	Dry heater (127V)
⚠	CR-WZ0184FC01	ET	AQ	N	B	ジョシツヒーター	Dry heater (200V)

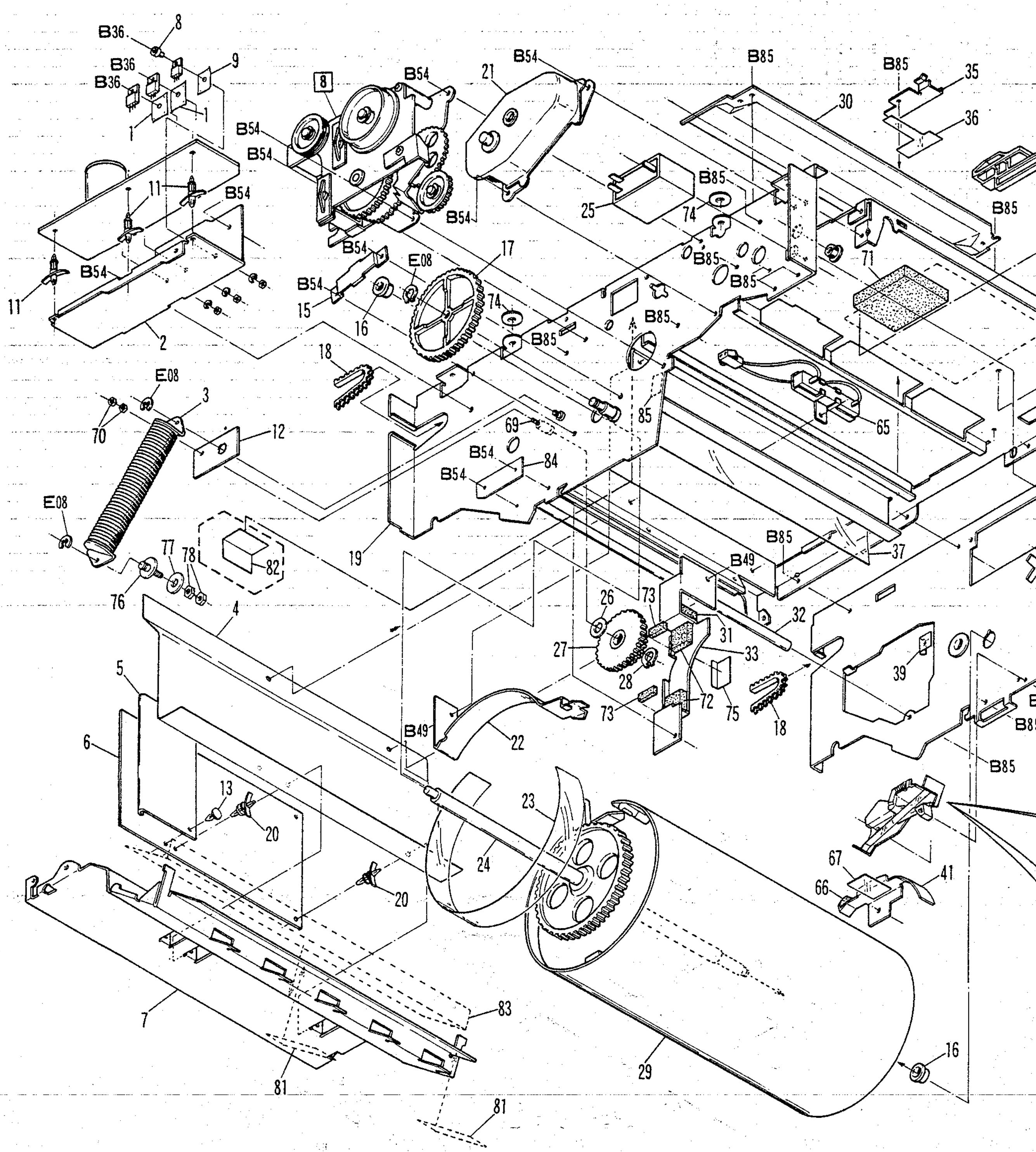
6 上フレーム (Upper frame)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION	
		Ja	Ex				
⚠ 65	CR-WZ0185FC01	ET	AQ	N	B	ジョシツヒーター	Dry heater (220V)
⚠	CR-WZ0186FC01	ET	AQ	N	B	ジョシツヒーター	Dry heater (240V)
66	PMLT-0321FCZZ	DA	AA	N	C	シャフウバンCヨウモルト	Cushion
67	PSHEP0654FCZZ	DA	AA	N	C	シャフウバンCヨウマイラー	Sheet
68	LANGT0954FCZZ	DU	AH	N	C	ペーパー カバーアングル	Paper cover angle
69	LBOSZ0545FCZZ	DQ	AF	N	C	DVクドウボス	DV drive boss
70	LX-NZ0025FCZZ	DA	AA	N	C	ナット	Nut
71	PMLT-0313FCZZ	DB	AB	N	C	ファンヨウモルト	Fan cushion
72	PMLT-0314FCZZ	DA	AA	N	C	シャフウバンモルトA	Cushion A
73	PMLT-0315FCZZ	DA	AA	N	C	シャフウバンモルトB	Cushion B
74	PSHEP0634FCZZ	DA	AA	N	C	アキュライド シート	Sheet
75	PSHEP0645FCZZ	DA	AA	N	C	シャフウバン B スエード	Shield plate B sheet
76	LBOSZ0556FCZZ	DU	AH	N	C	ブンリバネボス D	Boss D
77	LX-WZ0111FCZZ	DB	AB	N	C	ブンリヨウ ワッシャ C	Washer
78	LX-NZ0026FCZZ	DA	AA	N	C	ナット	Nut
79	PTPE-0059FCZZ	DH	AE	N	C	マジックテープ (カイガイノミ)	Tape
80	PFiLZ0037FCZZ		AT	N	C	オゾンフィルター (カイガイノミ)	Ozon filter
81	PSHEP0678FCZZ	DB	AB	N	C	Pガイドホジョマイラー (カイガイノミ)	P-guide sheet (U.S.A,Canada)
82	PSHEP0680FCZZ	DB	AB	N	C	ペーパーガイドG マイラーB	Paper guide G sheet B
83	PSHEP0657FCZZ	DE	AC	N	C	メインハーネス ホゴマイラー	Protect sheet
84	LPLTM1214FCZZ	DE	AC	N	C	テンションキセイバン	Plate
85	TLABZ0876FCZZ	DA	AA	N	C	ドラムイチラベル	Label

7 ハクリユニット (Separator unit)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION	
		Ja	Ex				
1	CANGK0957FC01	DQ	AF	N	C	ハクリコテイバンAS	Separator fixing plate
2	CTPE-0049FC01	EF	AM	N	C	リムーバテープAS	Remover tape ass'Y (Japan)
	CTPE-0055FC01	EC	AL	N	C	リムーバテープAS	Remover tape ass'Y (Export)
3	MSPRT0639FCZZ	DA	AA	N	B	ハクリバネ	Separator spring
4	PTPE-0050FCZZ	DA	AA	N	C	リムーバーテープB	Remover tape B (Japan)
	PTPE-0056FCZZ	DA	AA	N	C	リムーバーテープB	Remover tape B (Export)
5	PGiDH0453FCZZ	DF	AD		C	ハクリガイド	Separator guide (Japan)
	PGiDH0479FCZZ	EF	AM	N		ハクリガイド	Separator guide (Export)
7	CGiDM0464FC51	EB	AL	N	C	リムーバー ユニット	Remover ass'y(Japan)
	CGiDM0464FC52		AG	N	C	リムーバー ユニット	Remover ass'y(Export)

6 上フレーム (Upper frame)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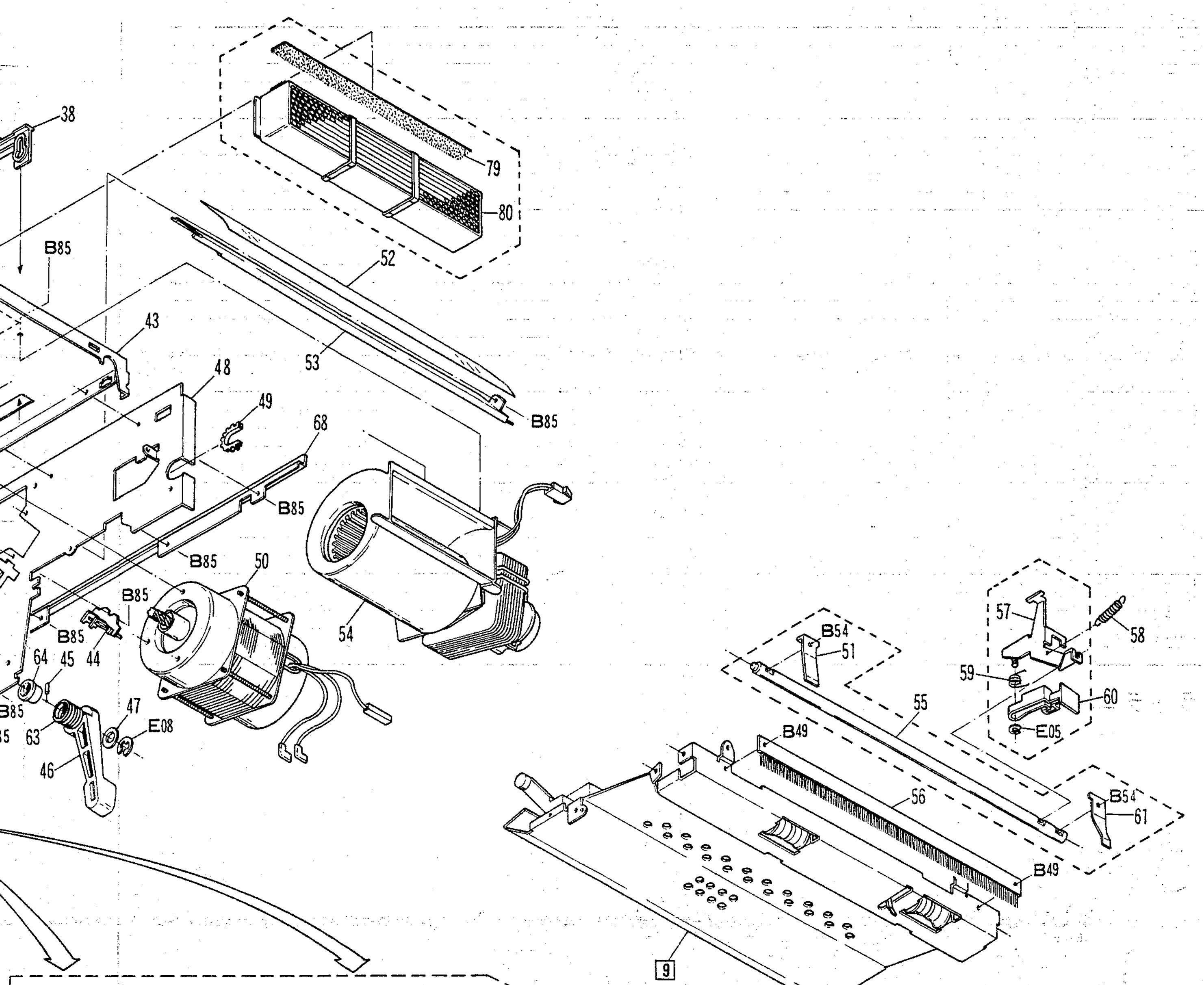
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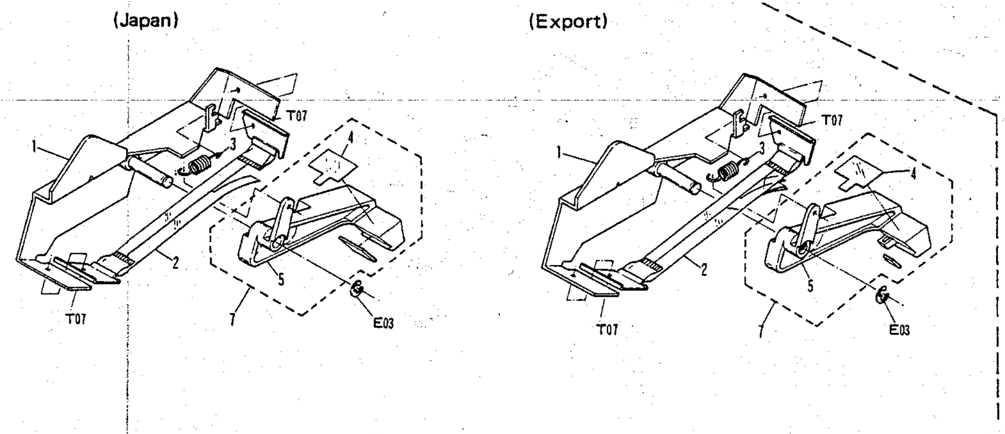
7 ハクリユニット (Separator unit)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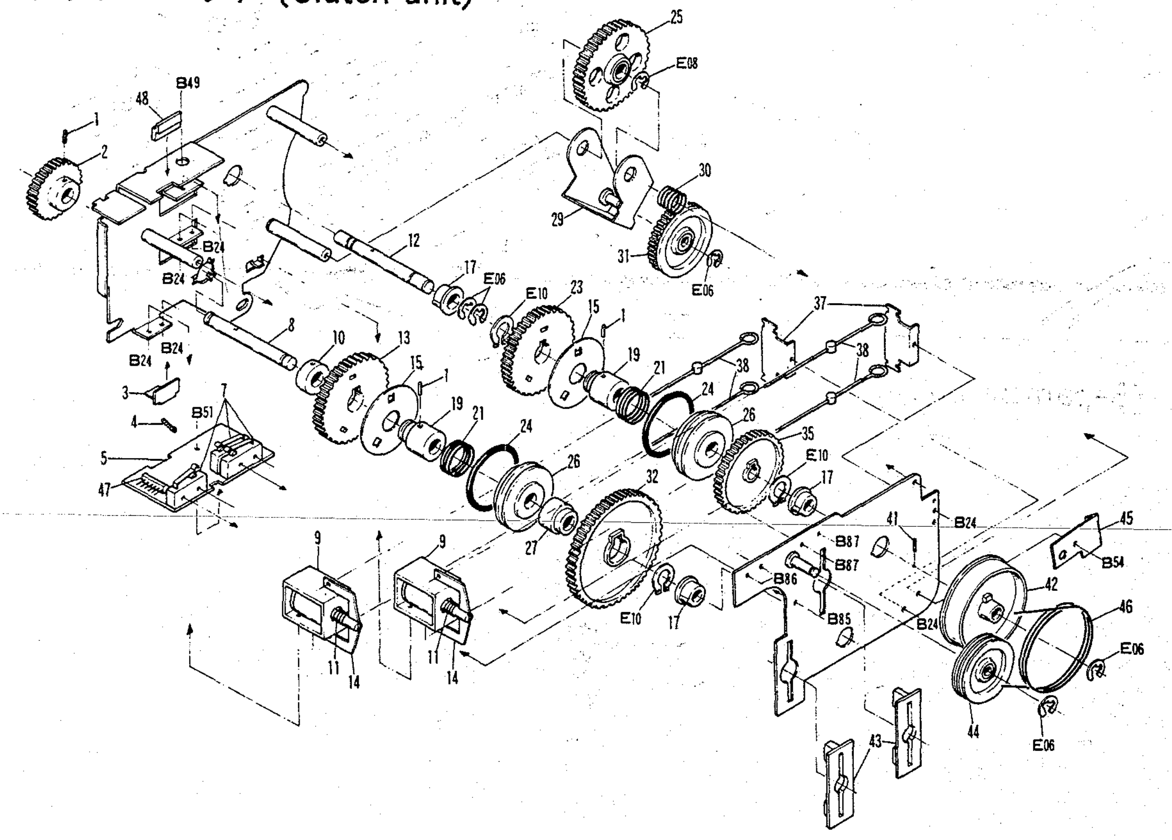
8 クラッチユニット (Clutch unit)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION	
		Ja	Ex				
1	LX−BZ0194FCZZ	DB	AB	N	C	ビス	Screw
2	NGERH0165FCZZ	DS	AG	N	C	ドラムクドウギヤ	Drum drive gear
3	LPLTM1061FCZZ	DB	AB	N	C	ブレーキバン	Break plate
4	MSPRP0643FCZZ	DB	AB	N	B	ブレーキバネ	Break spring
5	QPWBE0295FCZZ	DF	AD	N	C	クドウフレムキバン	Drive PWB
7	QSW−M0206FCZZ	DS	AG	N	A	マイクロスイッチ	Microswitch
8	NSFTZ0469FCZZ	DW	AH	N	C	クラッチジク A	Clutch shaft A
9	RPLU−0079FCZZ	EF	AM	N	A	ソレノイドTF.TR	Solenoid
10	NBRGY0169FCZZ	EA	AK	N	B	ボールベアリング	Ball bearing
11	MSPRC0644FCZZ	DA	AA	N	B	ソレノイドフッキバネ	Solenoid Return spring
12	NSFTZ0470FCZZ	DW	AH	N	C	クラッチジクB	Clutch shaft B
13	NGERH0161FCZZ	DD	AC	N	C	42T ギヤ	Gear (42T)
14	LPLTM1062FCZZ	DB	AB	N	C	アッチャクバン	Pressure plate
15	LPLTM1079FCZZ	DE	AC	N	C	マサツバン	Clutch plate
17	NBRGC0136FCZZ	DD	AC		B	ベアリング	Bearing
19	CCLR−0165FC01	DU	AG	N	C	クラッチカラ−B	Clutch coller B
21	MSPRD0642FCZZ	DJ	AE	N	B	クラッチバネ−H	Clutch spring
23	NGERH0163FCZZ	DE	AC	N	C	45Tギヤ	Gear (45T)
24	PRNGP0024FCZZ	DC	AC	N	C	0リング	O Ring
25	CGERH0159FC01	EC	AL	N	C	45Tギヤ	Gear (45T)
26	PPiPP0056FCZZ	DD	AC	N	C	クラッチスリーブ	Clutch sleeve
27	CCLR−0164FC01	DU	AG	N	C	クラッチカラ−A	Clutch coller A
29	CPLTM1060FC01	EA	AK	N	D	FXレンケツバン	FX joint plate
30	MSPRT0656FCZZ	DB	AB	N	B	FXフッバネ H	FX return spring H
31	CGERH0160FC01	EK	AN	N	C	FX35Tギヤ	FX gear (35T)
32	NGERH0164FCZZ	DF	AD	N	C	52Tギヤー	Gear (52T)
35	NGERH0162FCZZ	DD	AC	N	C	40Tギヤー	Gear (40T)
37	LPLTM1080FCZZ	DC	AB	N	C	アッチャクシジバン	Presure plate
38	NSFTZ0471FCZZ	DH	AD		C	アッチャクジク	Pressure shaft
41	LPiNS0078FCZZ	DA	AA	N	C	ヘイコウマル3X7.5	Pin
42	NPLYZ0064FCZZ	DG	AD	N	C	ドライブプーリー	Drive pulley
43	PGiDH0467FCZZ	DB	AB	N	C	ソレノイドレバーガイド	Solenoid lever guide
44	NPLYZ0065FCZZ	DD	AC	N	C	ホジョプーリー	Pulley
45	LPLTM1093FCZZ	DC	AB	N	C	ギヤチョウセイバン	Gear adjusting plate
46	PWiR−0077FCZZ	EC	AL	N	C	テーブルワイヤー	Table drive wire
47	QCNCM0130FCZZ	DL	AE	N		コネクター	Connector (7P)
48	PBRKS0033FCZZ	DC	AB	N	B	ブレーキ	Brake
	ユニット (Unit)						
901	CFRM−0207FC31	LJ	BM	N	C	クドウフレームユニット	Drive frame unit

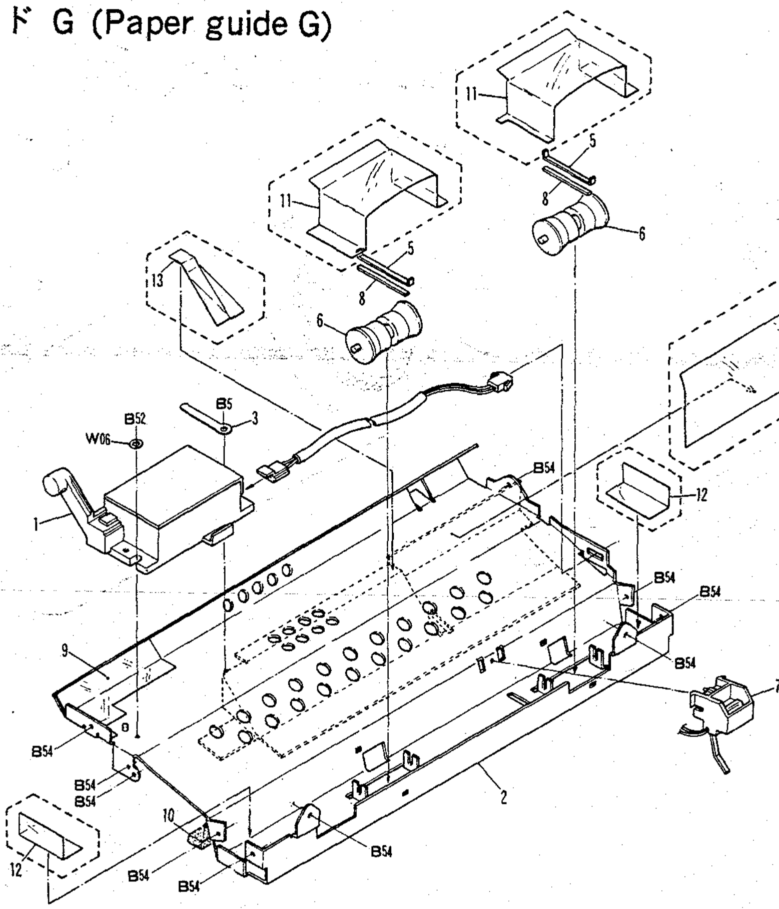
8 クラッチユニット (Clutch unit)



9 ペーパーガイド G (Paper guide G)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION	
		Ja	Ex				
⚠ 1	RTRNZ0231FCZZ	HA	BE	N	B	コウアツトランス MC	MHVG Transformer(100V series)
⚠	RTRNZ0242FCZZ	HA	BE	N	B	コウアットランス MC	MHVG Transformer (200V series)
2	PGiDH0458FCZZ	EN	AP	N	C	ペーパーガイドG−H	Paper guide (Japan)
	CGiDH0458FC01		AT	N	C	ペーパーガイド G	Paper guide G ass'y (Export)
3	LHLDW0135FCZZ	DA	AA		C	ワイヤーホルダー	Wire holder
5	MSPRP0655FCZZ	DA	AA	N	B	ハイシローラバネ	Delivery roller spring
6	NRÖLP0234FCZZ	DH	AC		C	ハイシローラー B	Delivery roller B
7	QSW−L0209FCZZ	ED	AM	N	A	リードスイッチ	Reed switch
8	PSHEZ0650FCZZ	DC	AB	N	C	ハイシローラーヨウスェード	Sheet
9	PSHEP0646FCZZ	DM	AF	N	C	ペーパーガイドGヨウマ イラー	Sheet
10	PMLT−0317FCZZ	DD	AC	N	C	シャフウモルト	Cushion
11	PSHEP0679FCZZ	DL	AE	N	C	ローラーカバーヨウマイラー	Roller cover sheet
12	PSHEP0680FCZZ	DB	AB	N	C	PガイドG マイラー B	P−guide−G sheet B
13	PSHEP0692FCZZ	DK	AE	N	C	PガイドG マイラー C	P−guide−G sheet C
14	PSHEP0693FCZZ	DK	AE	N	C	PガイドG マイラー D	P−guide−G sheet D

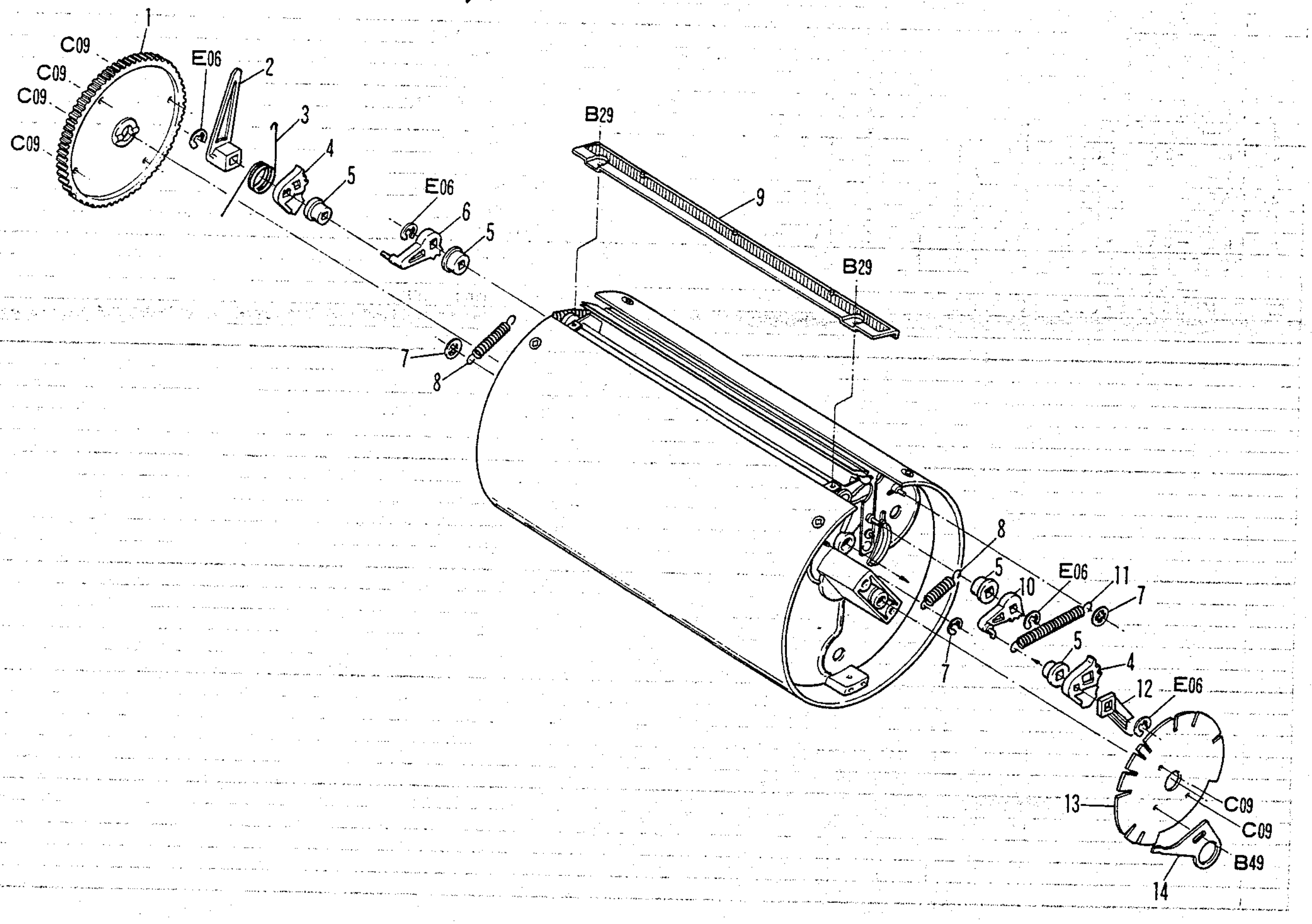
9 ペーパーガイド G (Paper guide G)



10 ドラムユニット (Drum unit)

NO.	PARTS CODE	PRICE RANK Ja	PRICE RANK Ex	NEW MARK	PART RANK	DESCRIPTION	
1	NGERH0109FCZZ	FV	AX		C	DRギヤー90T	DR gear (90T)
2	MLEVP0197FCZZ	DH	AD		C	DRソウサ レバー	DR operation lever
3	MSPRT0505FCZZ	DD	AC		B	MGヨウバネ	MG spring
4	MCAMP0031FCZZ	DB	AB		C	DRレバーヨウカム	DR lever cam
5	NBRGC0124FCZZ	DB	AB		B	ジクウケ	Bearing
6	MLEVP0206FCZZ	DB	AB		C	オサエテンションレバーB	Tension lever
7	LX−WZ0067FCZZ	DA	AA		C	ワッシャ	Washer
8	MSPRT0458FCZZ	DD	AC		B	DRテンションバネ	DR tension spring
9	CFiX−0125FC01	DW	AH	N	D	DRシジイタ AS	DR sub plate
10	MLEVP0195FCZZ	DB	AB		C	オサエテンションレバー	Tension lever
11	MSPRT0459FCZZ	DD	AC		B	DRセンタンオサエバネ	Fixing spring
12	CLEVP0251FC01	DH	AE	N	C	マスターリセットレバー	Master reset lever
13	LPLTM1040FCZZ	DJ	AE	N	C	タイミングプレート	Timing plate
14	LPLTM0711FCZZ	DD	AC		C	タイミングチヨウセイバン	Timing adjusting plate

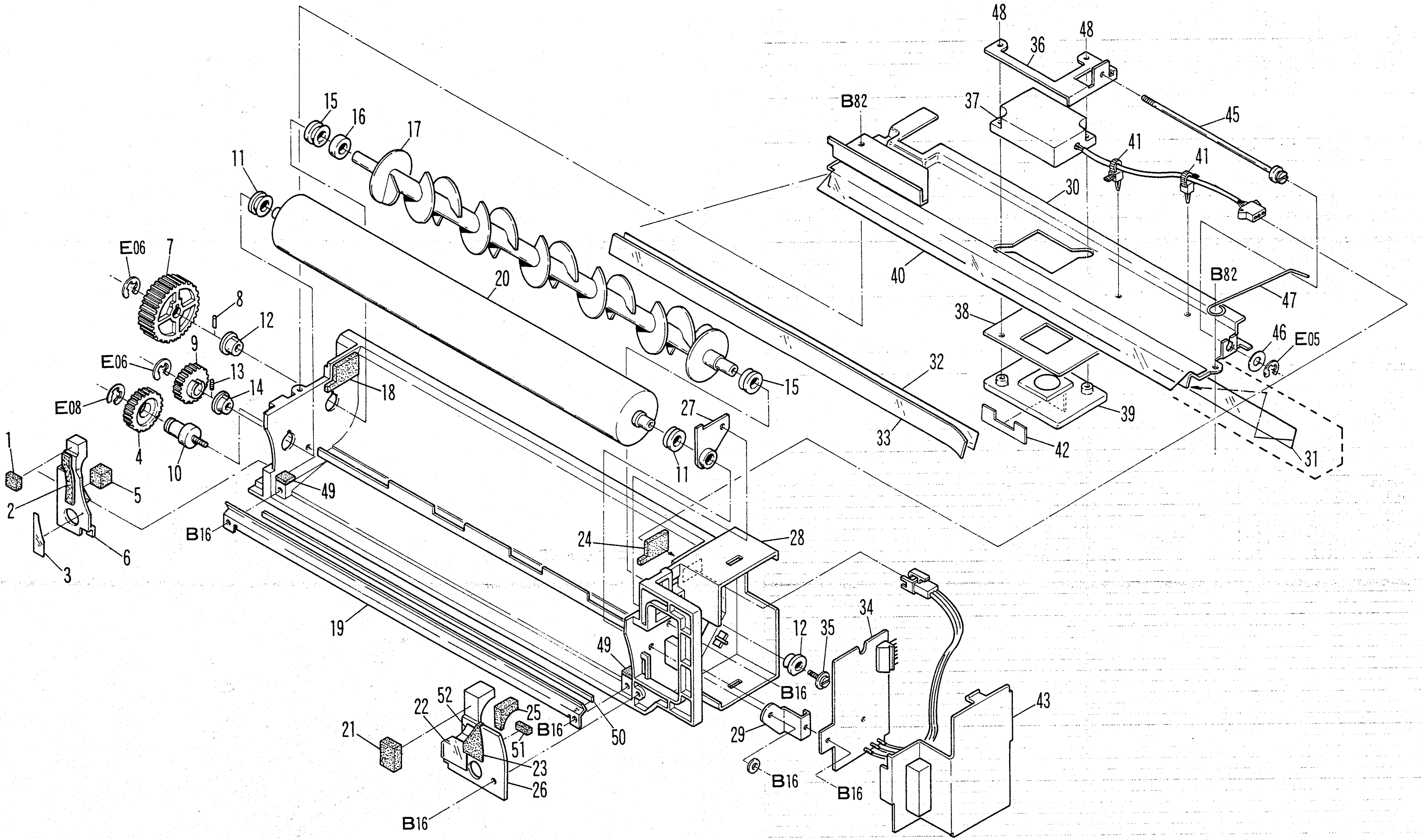
10 ドラムユニット (Drum unit)



11 DV ユニット (Developing section)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION	
		Ja	Ex				
1	PMLT−0320FCZZ	DA	AA	N	C	モルト	Cushion
2	PSHEZ0591FCZZ	DA	AA	N	C	スペーサーRヨウ スェード	Spacer sheet
3	PSHEP0643FCZZ	DB	AB	N	C	スペーサーRマイラー	Spacer R sheet
4	NGERH0111FCZZ	DH	AD		C	24Tギヤ	Gear (24T)
5	PMLT−0308FCZZ	DA	AA	N	C	DVモルト R	DV cushion (R)
6	PSPAZ0179FCZZ	DE	AC	N	C	DVスペーサー R	DV spacer (R)
7	NGERH0158FCZZ	DE	AC	N	C	DVクトウギヤー36T	DV drive gear (36T)
8	LPiNS0024FCZZ	DB	AB		C	ヘイコウピン B	Pin B
9	NGERH0156FCZZ	DD	AC	N	C	DVクドウギヤー	DV drive gear
10	NSFTZ0462FCZZ	DH	AD	N	C	DVクドウジク C	DV drive shaft C
11	PRNGP0013FCZZ	DY	AK		C	Vリング	V ring (8ϕ)
12	NBRGC0136FCZZ	DD	AC		B	トナーボックスヨウベアリング	Toner box bearing
13	XXXSP30L08000	DB	AB		C	ビス	Screw
14	NBRGC0140FCZZ	DH	AD		B	ベアリング	Bearing
15	PRNGP0015FCZZ	DY	AK		C	Vリング (6マル)	V ring (06)
16	PCLR−0163FCZZ	DD	AC	N	C	カクハンローラーカラー	Stirring roller collar
17	NRŌLP0288FCZZ	FA	AR	N	C	カクハンローラ	Stirring roller
18	PMLT−0307FCZZ	DA	AA	N	C	DVモルト Q	DV cushion (Q)
19	CPLTM1045FC01	DZ	AK	N	C	DVドクター AS	DV doctor
20	NRŌLM0297FCZZ	HA	BE	N	C	MGローラー	MG roller
21	PMLT−0319FCZZ	DA	AA	N	C	モルト	Cushion
22	PSHEP0689FCZZ	DE	AC	N	C	スペーサーF マイラー	Spacer F sheet
23	PSHEZ0688FCZZ	DK	AE	N	C	DV スペーサーF スエード	DV Spacer F sheet
24	PMLT−0306FCZZ	DA	AA	N	C	DVモルト P	DV cushion (P)
25	PMLT−0302FCZZ	DA	AA	N	C	スペーサFヨウモルト	Spacer F cushion
26	PSPAZ0178FCZZ	DF	AD	N	C	DVスペーサー F	DV spacer (F)
27	LPLTM1043FCZZ	DD	AC	N	C	MGチョウセイバン	MG adjusting plate
28	CBŌXZ0051FC01	FS	AW	N	C	DVボックス AS	DV box
29	LPLTM1047FCZZ	DD	AC	N	C	バイアスレンケツハン	Bias joint plate
30	CCŌVP0391FC01	ES	AQ	N	C	DVカバーAS	DV cover
31	PSHEP0630FCZZ	DC	AB	N	C	ブレードホジョマイラ	Blade sheet
32	PTPE−0046FCZZ	DA	AA	N	C	DVブレードヨウテープ	DV blade tape
33	UCLE−0029FCZZ	FK	AU	N	B	DVブレード	DV blade
34	RTRNZ0237FCZZ	FX	AX	N	B	バイアストランス	Bias transformer
35	LX−BZ0187FCZZ	DA	AA	N	C	ビス	Screw
36	LPLTM1046FCZZ	DF	AD	N	C	DVリョウチョウセイバン	DV adjusting plate
37	RDTCT0021FCZZ	GC	AZ	N	B	トナーセンサー	Toner sensor
38	LPLTM1058FCZZ	DD	AC	N	C	DVシヤヘイバン	DV plate
39	LPLTM1044FCZZ	DD	AC	N	C	DVコントロールバン	DV control plate
40	PSHEP0642FCZZ	DE	AC	N	C	DV BOX カバーマイラー	Sheet
41	LBNDJ0020FCZZ	DB	AA		C	スナップバンド	Wire fixing band
42	PSHEP0629FCZZ	DC	AB	N	C	トナーコントロールマイラー	Toner sheet
43	PCŌVP0392FCZZ	DF	AD	N	C	DVキバンカバー	DV PWB cover
45	LX−BZ0179FCZZ	DV	AH	N	C	DVリョウチョウセイビス	DV adjusting screw
46	LX−WZ0117FCZZ	DB	AB	N	C	ワッシャー	Washer
47	PWiR−0079FCZZ	DB	AB	N	C	DVホジョワイヤー	DV Wjre
48	LX−BZ0190FCZZ	DA	AA	N	C	ビス	Screw
49	PSEL−0035FCZZ	DA	AA	N	B	DVシール F	DV sheel F
50	PSEL−0036FCZZ	DC	AB	N	B	DVシール G	DV sheel G
51	PMLT−0335FCZZ	DA	AA	N	C	DV スペーサーF モルトT	Chushion T
52	PSHEP0710FCZZ	DA	AA	N	C	DV スペーサーF マイラーC	DV speacer F sheet C
	ユニット (Unit)						
937	RLMPU0146FCZZ	GV	BD		A	ヒーターランプ	Heater lamp (220V)

11 DV ユニット (Developing section)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12 MC ユニット (MC unit)

NO.	PARTS CODE	PRICE RANK Ja	PRICE RANK Ex	NEW MARK	PART RANK	DESCRIPTION	
1	PCŌVP0298FCZZ	DA	AA	N	C	MC カバー C	MC cover C
2	QPLG−0030FCZZ	DL	AE		C	バナナプラク	Plug
3	LHLDZ0425FCZZ	DK	AE	N	C	MCホルダーA N	MC holder A
4	DWiR−0158CSZZ	HM	BH		A	チャージャーセン	Charger wine
5	CCASZ0079FC01	FL	AV	N	E	MCケース AS	MC case
7	PCŌVP0437FCZZ	DB	AB	N	C	MC カバー B	MC cover B
8	MSPRT0513FCZZ	DB	AA		B	テンションバネ	Tension spring
9	LHLDZ0487FCZZ	DQ	AF	N	C	MCホルダーB N	MC holder B
10	TLABP0466FCZZ	DA	AA		C	チャージャラベル1	Label (1)
11	TLABH0543FCZZ	DA	AA		C	ヤジルシラベル	Label (Arrow)

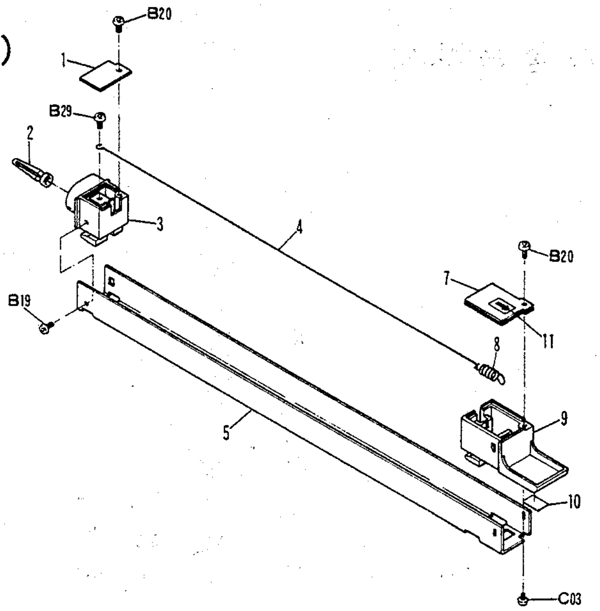
13 TC ユニット (TC unit)

NO.	PARTS CODE	PRICE RANK Ja	PRICE RANK Ex	NEW MARK	PART RANK	DESCRIPTION	
1	PCŌVP0281FCZZ	DA	AA		C	MC カバー A	MC cover A
2	QPLG−0030FCZZ	DL	AE		C	バナナプラク	Plug
3	LHLDZ0485FCZZ	DJ	AE	N	C	TCホルダー R	TC holder R
4	DWiR−0158CSZZ	HM	BH		A	チャージャーセン	Charger wine
5	PCASZ0080FCZZ	FB	AS	N	C	TCケース H	TC case H
6	PCŌVF0436FCZZ	DB	AB	N	C	TC カバー B	TC Cover B
7	TLABP0467FCZZ	DA	AA	N	C	チャージャラベル2	Label (2)
8	TLABH0543FCZZ	DA	AA		C	ヤジルシラベル	Label (Arrow)
9	LX−BZ0113FCZZ	DH	AE		C	ビス	Screw
10	MSPRT0513FCZZ	DB	AA		B	テンションバネ	Tension spring
11	LHLDZ0484FCZZ	DH	AD	N	C	TCホルダー F	TC holder F

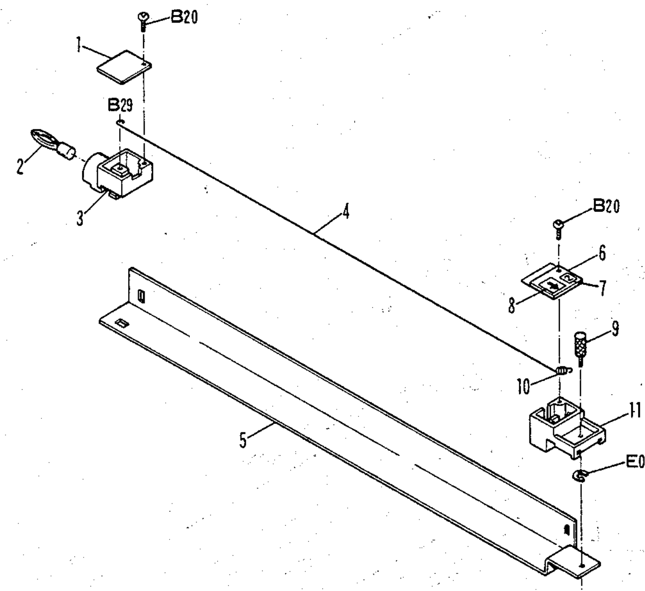
14 DC ユニット (DC unit)

NO.	PARTS CODE	PRICE RANK Ja	PRICE RANK Ex	NEW MARK	PART RANK	DESCRIPTION	
1	PCŌVP0285FCZZ	DA	AA	N	C	DC カバー A	DC cover A
2	QPLG−0030FCZZ	DL	AE		C	バナナプラグ	Plug
3	LHLDZ0446FCZZ	DJ	AE	N	C	DCホルダーR	DC holder R
4	DWiR−0158CSZZ	HM	BH		A	チャージャーセン	Charger wine
5	CCASZ0081FC01	ED	AM	N	E	DCケース AS	DC case (Japan)
6	PMLT−0318FCZZ	DK	AE		C	DCケースヨウモルト	Cushion
7	TLABH0543FCZZ	DA	AA	N	C	ヤジルシラベル	Label (Arrow)
8	――――						
9	PCŌVP0438FCZZ	DB	AB	N	C	DC カバー F	DC Cover F
10	MSPRT0513FCZZ	DB	AA		B	テンションバネ	Tension spring
11	LHLDZ0445FCZZ	DH	AE	N	C	DCホルダーF	DC holder F
12	TLABP0468FCZZ	DA	AA	N	C	チャージャラベル3	Label (3)
13	PSHEZ0677FCZZ	DA	AA	N	C	DCケースヨウシート	DC case sheet
101	CCASZ0081FC02		AP	N	E	DC ケース	DC Case (Export)
102	PMLT−0334FCZZ		AE	N	C	DC ケースヨウモルト	Cushion (Export)

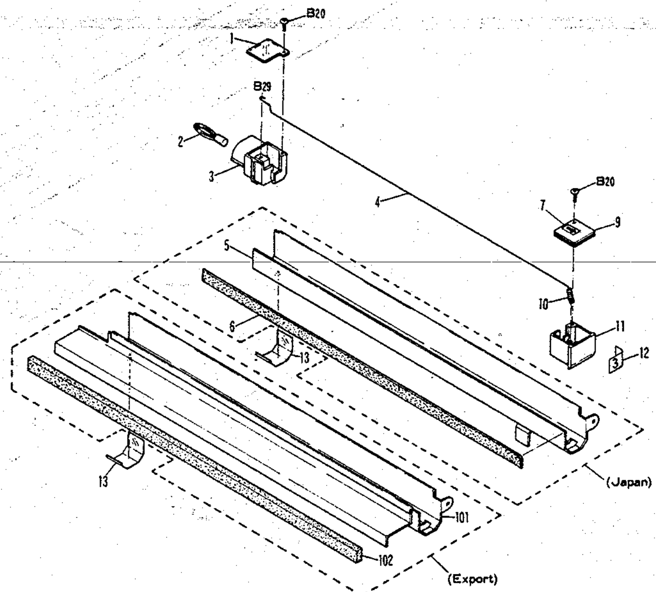
12 MC ユニット (MC unit)



13 TC ユニット (TC unit)



14 DC ユニット (DC unit)



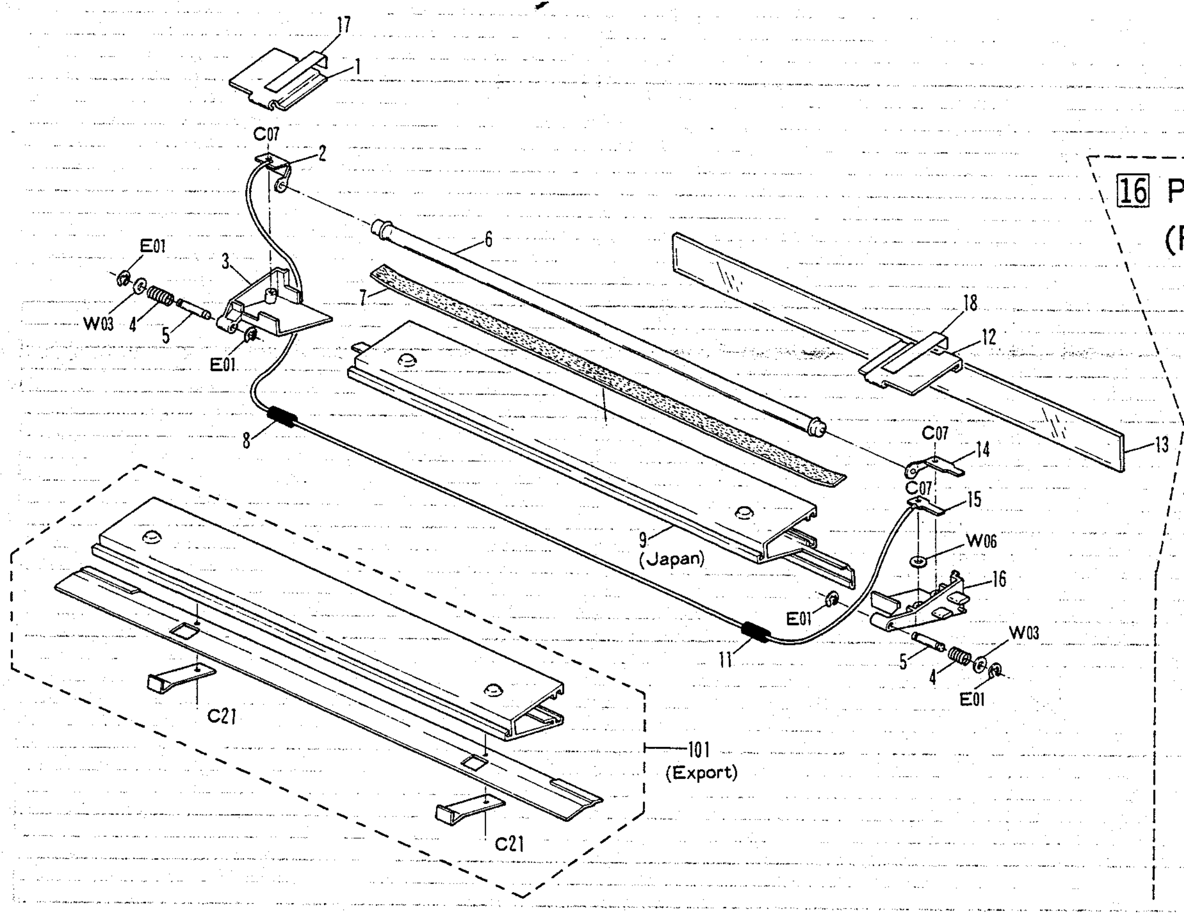
15 DC ランプユニット(DC lamp unit)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION	
		Ja	Ex				
1	PCOVP0374FCZZ	DE	AC	N	C	ジョデンホルダーカバーB	Discharge cover B
2	QSLPA0053FCZZ	DD	AC	N	C	ジョデンデンキョクC	Discharge electrode C
3	LHLDZ0411FCZZ	DF	AD	N	C	ジョデンホルダーB	Discharge holder B
4	MSPRK0501FCZZ	DA	AA	N	B	ジョデンロックバネ	Discharge lock spring
5	LPiNS0052FCZZ	DB	AB	N	C	ジョデンロックピン	Discharge lock pin
6	RLMPU0148FCZZ	FV	AX	N	A	ランプ	Lamp
7	PFLT−0019FCZZ	DJ	AE	N	C	DCランプヨウフェルトA	DC lamp cushion A
8	PTUBP0010FCZZ	DA	AA		C	チューブ	Tube
9	CREFL0054FC02	FJ	AU	N	C	DCレフレクター	DC reflector (Japan)
11	PTUBP0054FCZZ	DA	AA	N	C	チューブ	Tube
12	PCOVP0373FCZZ	DE	AC	N	C	ジョデンホルダーカバーA	Discharge cover A
13	PFiLW0033FCZZ	FG	AT	N	C	ジョデンフィルター	Discharge filter
14	QSLPA0051FCZZ	DH	AD	N	C	ジョデンデンキョクA	Dischage electrode A
15	QSLPA0052FCZZ	DD	AC	N	C	ジョデンデンキョクB	Dischrge electrode B
16	LHLDZ0410FCZZ	DG	AD	N	C	ジョデンホルダーA	Discharge holder A
17	PSHEP0649FCZZ	DA	AA	N	C	ジョデンランプマイラーB	Discharge lamp sheet B
18	PSHEP0648FCZZ	DA	AA	N	C	ジョデンランプマイラーA	Discharge lamp sheetA
101	CREFL0054FC03		AU	N	C	DC レフレクター	DC Reflector (Export)

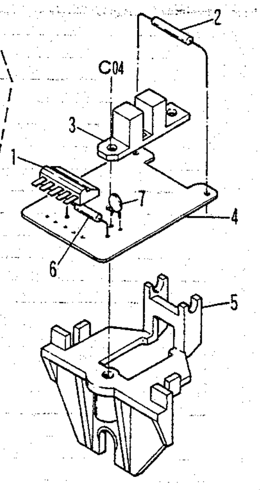
16 PT基板ユニット (PT P.W.B unit)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION	
		Ja	Ex				
1	QCNCM0054FCZZ	DH	AC		C	コネクター	Connector
2	QSW−L0205FCZZ	DN	AF	N	A	リードスイッチ	Reed switch
3	VHPEESM3B//−1	EG	AN		B	フォトトランジスター	Photo transistor
4	CPWBF0281FC51	FC	AS	N	E	PT キバンユニット	PT PWB unit
5	LANGT0948FCZZ	DC	AB	N	C	フォトトリツケアングル	Photo PWB fixing angle
6	VRD−ST2EY132J	DA	AA	N	C	テイコウ	Resistor (1/4W 1.3KΩ ±5%)
7	VCKYPU1HF223Z	DB	AA		C	コンデンサー	Capacitor (50WV 0.022μF)

15 DC ランプユニット(DC lamp unit)



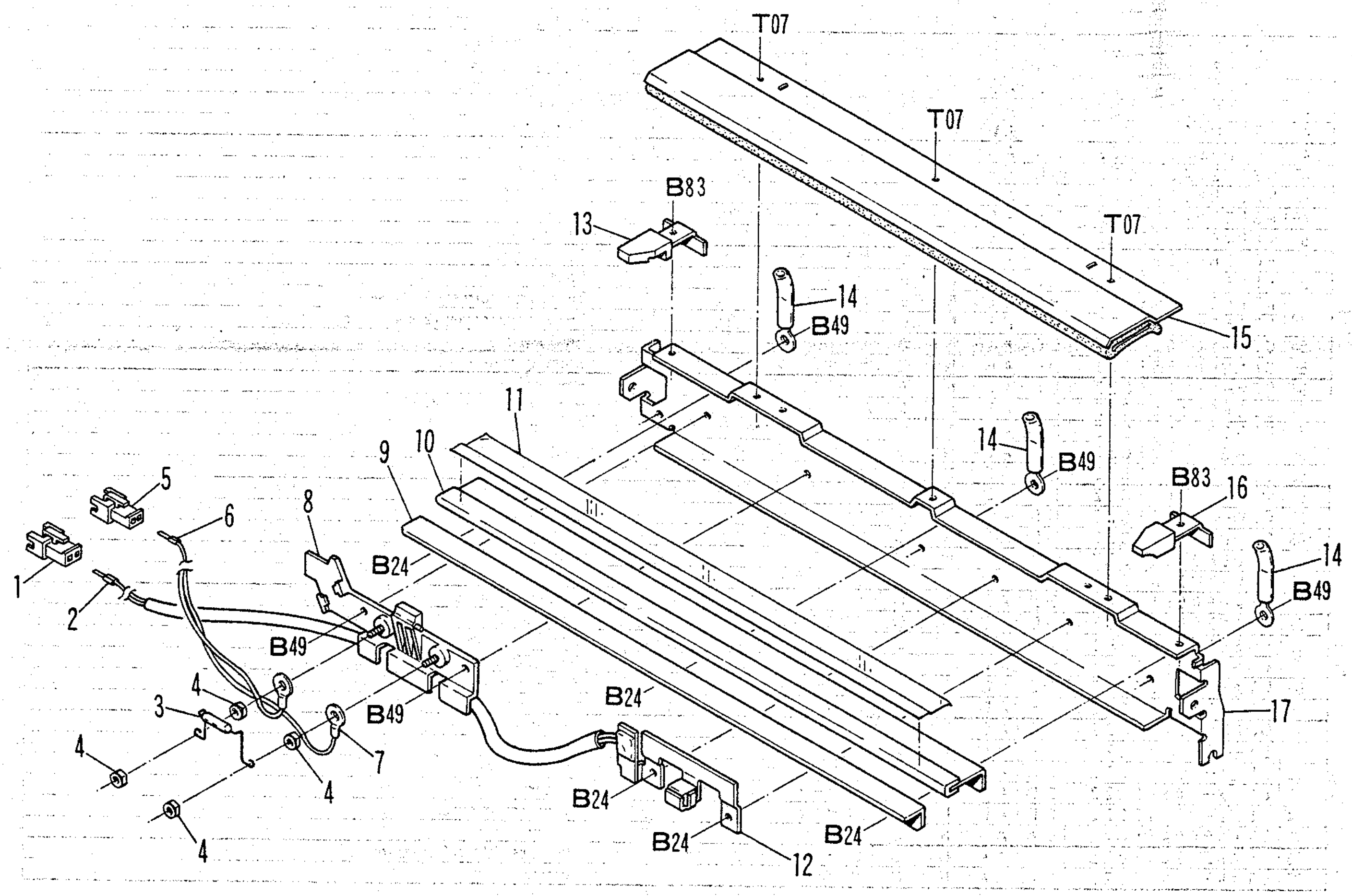
16 PT基板ユニット (PT P.W.B unit)



17 サーミスター取付板 ユニット (Thermistor holding bracket unit)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION	
		Ja	Ex				
1	PHOG−0168FCZZ	DC	AB	N	C	ホルダー	Holder (2P)
2	QPLGN0012FCZZ	DA	AA		C	プラグ	Plug
3	CFS−T0058FC52	EA	AK	N	A	オンドヒューズユニット	Temprature fuse unit
4	LX−NZ0035FCZZ	DA	AA		C	ナット	Nut
5	PHOG−0114FCZZ	DB	AB		C	ホルダー	Holder (2P)
6	QPLGN0026FCZZ	DA	AA		C	プラグ	Plug
7	QTANP0054FCZZ	DA	AA	N	C	タンシ	Terminal
8	LPLTM1068FCZZ	DX	AH	N	C	オンドヒューズトリツケバン	Temperature fuse fixing plate
9	LPLTM0721FCZZ	DH	AD		C	ブレードオサエバン	Blade fixing plate
10	UCLEZ0016FCZZ	FY	AY		B	ブレードA	Blade (A)
11	PTPE−0023FCZZ	GV	BD		C	テフロンテープ	Tape
12	RDTCT0022FCZZ	FV	AX	N	B	サーミスター	Thermistor
13	UCLEZ0017FCZZ	EC	AL		B	ブレードB	Blade (B)
14	LHLDW0322FCZZ	DB	AB		C	テイチャクヨウホルダー	Fusing holder
15	CFLT−0024FC31	FR	AW	N	B	オイルフェルト	Oil wick
16	UCLEZ0018FCZZ	EC	AL		B	ブレードC	Blade (C)
17	LPLTM1067FCZZ	EA	AK	N	C	サーミスタトリツケバン	Thermistor fixing plate

17 サーミスター取付板 ユニット (Thermistor holding bracket unit)



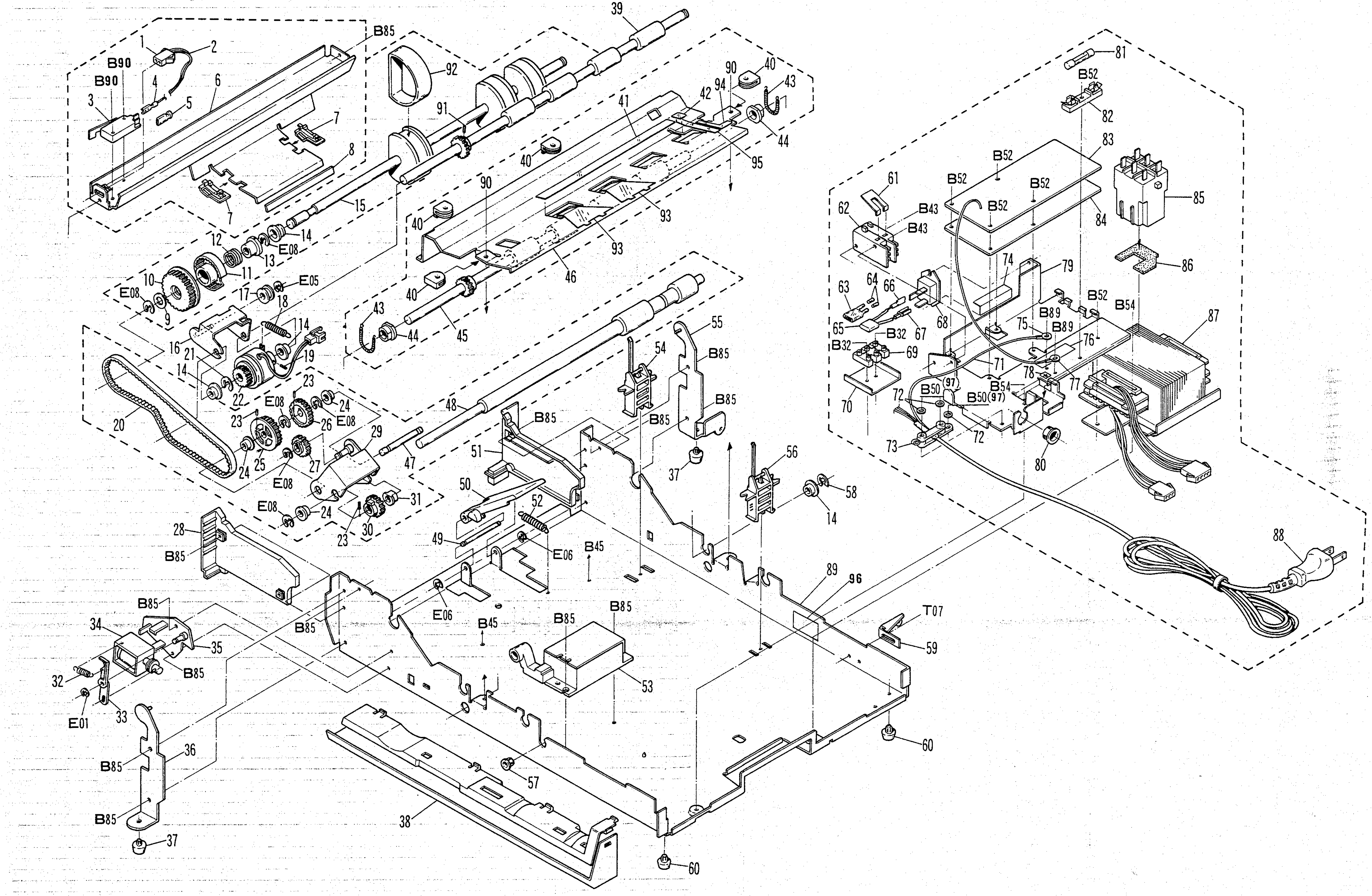
18 下フレーム (Lower frame)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION	
		Ja	Ex				
1	PHŌG—0139FCZZ	DB	AB		C	2Pプラグホルダー	2P Plug holder
2	QPLGN0018FCZZ	DA	AA		C	プラグ	Plug
3	QSW—M0211FCZZ	DW	AH	N	A	マイクロスイッチ	Microswitch
4	QTiPH0017FCZZ	DA	AA		C	タンシ	Terminal
5	PHŌG—0007FCZZ	DA	AA		C	1Pソケットホルダー	1P socket holder
6	CANGT0960FC01	EE	AM	N	C	キュウシホキョウイタAS	Paper feed angle
7	LSTPP0097FCZZ	DC	AC	N	C	テサシストッパー	Manual feed stopper
8	PGUMS0092FCZZ	DA	AA	N	C	キュゥシガイドゴム	Paper feed guide rubber
9	LX—WZ0017FCZZ	DA	AA		C	ワッシャ	Washer
10	NPLYZ0062FCZZ	DU	AG	N	C	PFドライブプーリー	PF Drive pulley
11	PPiPP0045FCZZ	DH	AE		C	クラッチスリーブ	Clutch sleeve
12	MSPRC0541FCZZ	DR	AF		B	クラッチバネ L	Clutch spring L
13	LBŌSZ0383FCZZ	DS	AH	N	C	キュウシクラッチボス	PaPer feed clutch boss
14	NBRGC0167FCZZ	DC	AB	N	B	PFジクウケ N	PF Bearing N
15	NRŌLM0292FCZZ	FL	AV	N	C	PFローラーH	PF roller H
16	CPLTM1037FC01	DL	AE	N	C	タイミングテンションAS	Timing tension
17	PCLR—0123FCZZ	DD	AC		C	タイミングテンション カラー	Timing tension collar
18	MSPRT0696FCZZ	DD	AC	N	B	タイミングテンション スプリング	Spring
19	XXXSP30L10000	DB	AB		C	ビス	Wormscrew
20	NBLTV0013FCZZ	ES	AQ		B	タイミングベルト	Timing belt
21	LX—WZ0077FCZZ	DB	AA		C	ワッシャ	Washer
22	PCLC—0069FCZZ	GC	AZ	N	B	PSクラッチ	PS Clutch
23	LPiNS0024FCZZ	DB	AB		C	ヘイコウピン B	Pin B
24	NBRGC2019SCZZ	DH	AC		B	カムヨウベアリング	Bearing
25	NPLYZ0066FCZZ	DF	AD	N	C	プーリー21H	Pulley
26	NGERH0111FCZZ	DH	AD		C	24Tギヤ	Gear (24T)
27	NGERH0099FCZZ	DD	AC		C	ギヤー	Gear (18T)
28	PGiDH0460FCZZ	DJ	AE	N	C	カセットガイドR	Cassette guide R
29	CPLTM1036FC01	DP	AF	N	C	PFレンケツイタ AS	PF joint plate
30	NGERH0036FCZZ	DD	AC		C	ギヤー20	Gear (20T)
31	NBRGC0133FCZZ	DD	AC		B	PFジクウケ	Bearing
32	MSPRT0660FCZZ	DC	AB	N	B	PFクラッチバネ	PF Clutch spring
33	PTME—0081FCZZ	DC	AB	N	C	PFラッチーH	PF latch
34	RPLU—0071FCZZ	EM	AP	N	A	ペーパーソレノイド	Solenoid (HLL)
35	LHLDZ0272FCZZ	DQ	AF		C	ソレノイドホルダー	Solenoid holder
36	CANGK0956FC31	DU	AG	N	C	カイテンシジバン	Rotating holder angle R
37	GLEGP0010UCZZ	DB	AB		C	ゴム アシ	Rubber foot
38	PCŌVP0401FCZZ	DU	AH	N	C	ハーネスカバー	Wire cover
39	CRŌLM0294FC01	FV	AX	N	C	PSローラーA AS	PS roller A
40	PZETZ0037FCZZ	DC	AC	N	C	ペーパーガイドゼツエンブツ	Paper guide insulation
41	PSHEP0620FCZZ	DD	AC	N	C	ペーパーガイドDマイラー	Paper guide sheet D
42	PSHEP0622FCZZ	DA	AA	N	C	ペーパーガイドヨウマイラB	Paper guide sheet B
43	MSPRT0646FCZZ	DB	AB	N	B	PSスプリング	PS spring
44	NBRGP0170FCZZ	DC	AB	N	B	PSジクウケ	PS bearing
45	CRŌLM0295FC01	FR	AW	N	C	PSローラーB AS	PS roller B
46	PGiDH0455FCZZ	EX	AR	N	C	ペーパーガイドD—H	Paper guide D
47	NSFTZ0458FCZZ	DN	AF	N	C	PFレンケツジク B	PF joint shaft B
48	NRŌLR0316FCZZ	FU	AX	N	C	ハクリローラー	Separator roller
49	NSFTZ0472FCZZ	DE	AC	N	C	カセットシュウドウジク	Cassette shaft
50	MARMP0031FCZZ	DK	AE	N	C	カセットシュウドウアーム	Cassette arm
51	PGiDH0459FCZZ	DJ	AE	N	C	カセットガイドF	Cassete guide F
52	MSPRC0645FCZZ	DC	AB	N	B	カセットシユウドウバネ	Spring
⚠ 53	RTRNZ0249FCZZ	HC	BE	N	B	コウアツトランス TC	THVG Transformer (100V series)
⚠	RTRNZ0240FCZZ	HC	BE	N	B	コウアットランス TC	THVG Transformer (200V series)
54	QSW—L0203FCZZ	EC	AL	N	A	リードスイッチ	Reed switch
55	CANGK0955FC31	DW	AH	N	C	カイテンシジバンFAS	Rotating plate F
56	QSW—L0204FCZZ	EC	AL	N	A	リードスイッチ	Reed switch
57	LBSHC0110FCZZ	DC	AB	N	C	ブッシュ	Bushing (EX 220V only)
58	PRNGP0023FCZZ	DA	AA	N	C	グリプリンクマル7	Grip ring 07
59	LANGT0953FCZZ	DG	AD	N	C	ヒンジアングル	Hinge angle
60	GLEGP0010FCZZ	DC	AB	N	C	アシ	Rubber foot
61	MLEVF0207FCZZ	DH	AD		C	メインスイッチレバー	Main switch lever
62	QSW—M0127FCZZ	DS	AG	N	A	マイクロスイッチ	Microswitch
63	PHŌG—0166FCZZ	DB	AB	N	C	コンデンサーカバー	Capacitor cover
64	PTUBP0061FCZZ	DA	AA	N	C	チューブ	Tube
65	VCQYKU1HM104K	DD	AB		C	コンデンサー	Capacitor (0.1μF 50WV)
66	QTANP0058FCZZ	DD	AC	N	C	タブファストン250	Terminal #250
67	QTANP0059FCZZ	DD	AC	N	C	タブファストン187	Terminal #187
⚠ 68	VHSBCR30GM8R1	FG	AT	N	B	トライアック	Triac (100V series/50Hz,60Hz)
⚠	VHSAC16FiF/—1	FS	AW		B	トライアック	Triac (200V series/50Hz,60Hz)
69	QTANN0015FCZZ	DS	AG		C	3Pタンシダイ	3P Terminal
70	PSHEZ0336FCZZ	DH	AD		C	シート	Sheet
71	QCNW—0069FCZZ	DD	AC		C	アースワイヤー	Ground wire
72	LX—BZ0191FCZZ	DA	AA	N	C	ビス	Screw
⚠ 73	LFiX—0016FCZZ	DH	AD		C	ACコードオサエ C	AC cord holder
⚠	LFiX—0084FCZZ	DD	AC		C	ACコードオサエ	AC cord holder
74	PSHEP0601FCZZ	DB	AB	N	C	ACゼツエンシート	AC insulation sheet
75	QTANP0046FCZZ	DA	AA	N	C	タンシ	Terminal
76	TLABZ0901FCZZ		AA	N	C	ヒューズラベル	Fuse label (U.S.A,Canada only)
77	QTANP0013FCZZ	DA	AA	N	C	タンシ	Terminal

18 下フレーム (Lower frame)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION	
		Ja	Ex				
78	TLAB—4681CCZZ	DA	AA		C	アースラベル	Ground label
79	LHLDZ0440FCZZ	EC	AL	N	C	デンキブヒンホルダー	Holder
80	LBSHC0002FCZZ	DB	AC		C	ブッシュ	Grommet
⚠ 81	QFS—A2700QCZZ	DH	AD		A	ヒューズ	Fuse (20A) (100V/110V)
⚠	QFS—B0030FCZZ	DS	AH		A	ヒューズ	Fuse (120V/127V)
⚠	QFS—C0010FCZZ	DQ	AF		A	ヒューズ	Fuse (200V/220V/240V)
82	QFSHB0020FCZZ	DL	AF		C	ヒューズホルダー	Fuse holder (100V series)
83	CPWBF0283FC51	FJ	AT	N	E	NFキバンユニット	NF PWB unit
84	PSHEZ0595FCZZ	DD	AC	N	C	NFゼツエンシートA	NF insulation sheet
85	RRLYU0067FCN2	FU	AX	N	B	リレー	Relay
86	PCUSF0091FCZZ	DA	AA	N	C	リレーヨウクッション	Relay cushion
⚠ 87	RTRNP0230FCZZ	GV	BD	N	B	デンゲントランス	Power transformer (100V series/50Hz,60Hz)
⚠	RTRNP0235FCZZ	GW	BD	N	B	デンゲントランス	Power transformer (200V series/50Hz,60Hz)
88	QACCJ3412QCZZ	EG	AN		B	ACコード	AC cord(Japan)
89	CFRM—0206FC01	GK	BA	N	C	シタフレームユニット	Lower frame unit
90	LX—BZ0204FCZZ	DA	AA		C	ビス	Screw
91	LX—BZ0049FCZZ	DB	AB		C	ビス	Screw
92	NRŌLM0293FCZZ	DH	AD			PFゴムローラ	PF rubber roller
93	PSHEP0647FCZZ	DG	AD	N	C	PガイドDヨウマイラーC	P guide D sheet C
94	PSHEP0714FCZZ	DC	AC	N	C	Pガイド Dヨウ マイラーE	P guide D sheet E
95	PSHEP0713FCZZ	DE	AC	N	C	Pガイド Dヨウ マイラーD	P guide D sheet D
96	TLABZ0816FCZZ	DA	AA	N	C	NFヨウスイッチキリカエラベル	NF SW label
97	LX—BZ0192FCZZ	DA	AA		C	ビス	Screw(U.S.A,Canada only)

18 下フレーム (Lower frame)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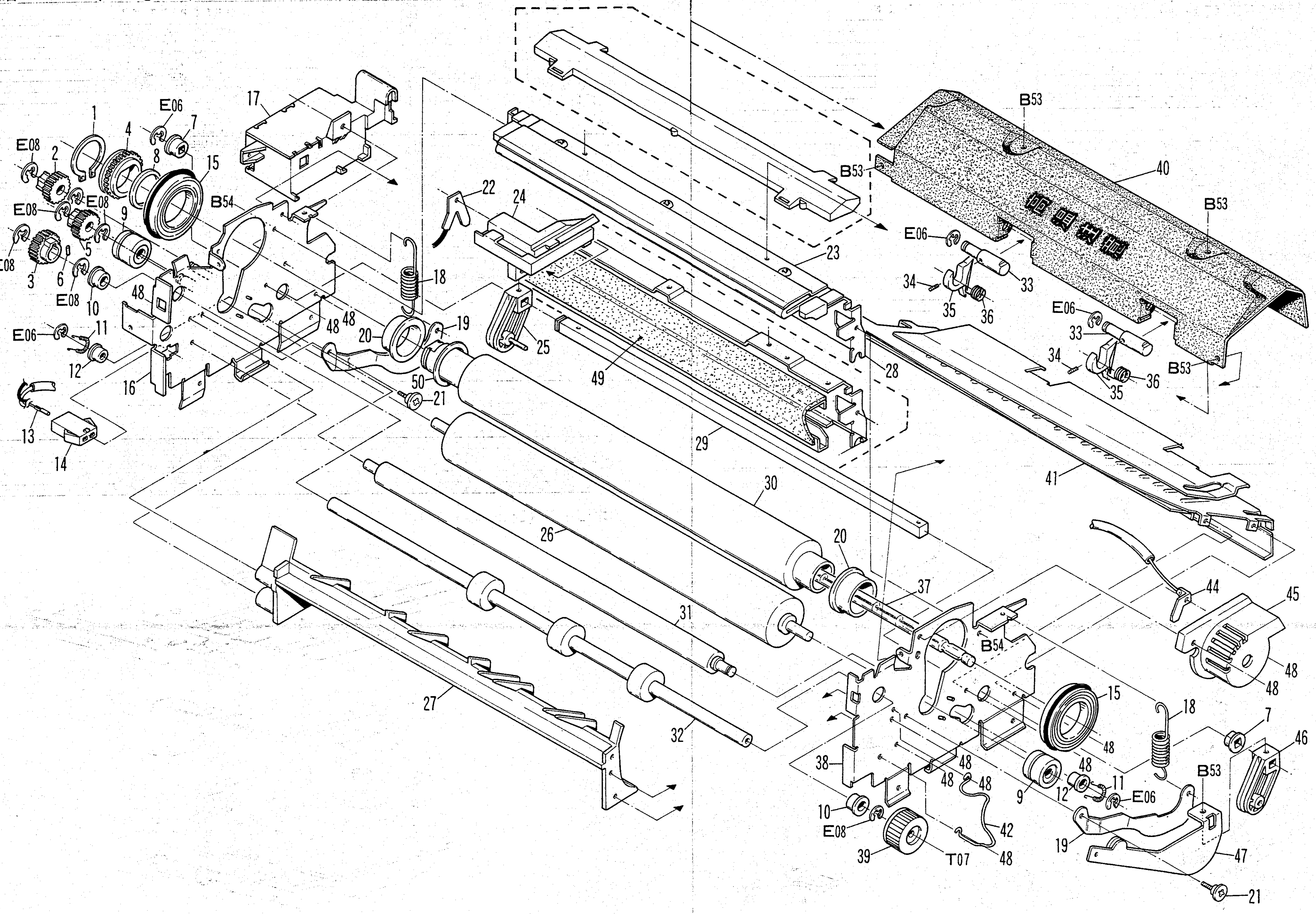
19 定着ユニット (Fusing unit)

	NO.	PARTS CODE	PRICE RANK Ja	PRICE RANK Ex	NEW MARK	PART RANK	DESCRIPTION	
	1	PRNGP0005FCZZ	DB	AB		C	Cリング A	C ring A
	2	NGERH0115FCZZ	DH	AE		C	18Tギヤ B	Gear B (18T)
	3	NGERH0036FCZZ	DD	AC		C	ギヤー20T	Gear (20T)
	4	NGERH0114FCZZ	DY	AK		C	テイチャクヨウ ギヤ	Fusing gear
	5	NGERH0099FCZZ	DD	AC		C	ギヤー	Gear (18T)
	6	LPiNS0024FCZZ	DB	AB		C	ヘイコウピン B	Pin B
	7	NBRGF0164FCZZ	DC	AB	N	B	カイジョジクウケ	Release bearing
	8	PSPAZ0151FCZZ	DQ	AG		C	ベアリングワッシャ	Spacer
	9	NBRGY0142FCZZ	ES	AQ		B	ベアリング	Bearing
	10	NBRGC0167FCZZ	DC	AB	N	B	PFジクウケ N	PF bearing N
	11	MSPRC0649FCZZ	DC	AB	N	B	クリーナーバネ	Cleaner spring
	12	NBRGC0100FCZZ	DD	AC		B	ジクウケ	Bearing
	13	QPLGN0012FCZZ	DA	AA		C	プラグ	Plug
	14	PHŌG−0168FCZZ	DC	AB	N	C	ホルダー	Holder (2P)
	15	NBRGP0146FCZZ	FG	AT		B	HRベアリング	HR bearing
	16	CFRM−0210FC01	ED	AM	N	C	ヒーターフレームR AS	Heater frame (R)
⚠	17	RTRNZ0250FCZZ	HA	BE	N	B	コウアツトランス DC	DHVU transformer (100V series)
⚠		RTRNZ0241FCZZ	HA	BE	N	B	コウアットランス DC	DHVU Transformer (200V series)
	18	MSPRC0648FCZZ	DE	AC	N	B	テイチャクアツチャバネ	Fusing pressure spring
	19	MLEVF0250FCZZ	DK	AE	N	C	テイチャクローラレバー	Fusing roller lever
	20	LBSHZ0101FCZZ	FB	AS		C	ベアリンクブッシュ	Bearing bushing
	21	LX−BZ0184FCZZ	DB	AB	N	C	ビス	Screw
	22	QSLPA0060FCZZ	DE	AC	N	C	ヒーターデンキョク R	Heater electrode R
	23	CFLT−0024FC31	FR	AW	N	B	オイルフェルト	Wick
	24	LHLDZ0442FCZZ	DV	AH	N	C	デンキョクホルダーR	Electrode holder R
	25	CLEVP0249FC02	EK	AN	N	C	アツカイレバーB	Pressure release lever B
	26	NRŌLi0232FCZZ	LV	BQ		C	アツチヤク ローラー	Pressure roller
	27	PSRA−0003FCZZ	EX	AR	N	C	オイルウケザラ	Oil try
	29	NSFTZ0475FCZZ	DZ	AK	N	C	アツカイジョジク	Pressure release shaft
	30	NRŌLT0231FCZZ	LK	BP		C	ヒートローラー	Heat roller
	31	UCLER0031FCZZ	EZ	AR	N	B	HRクリニングローラ	HR cleaning roller
	32	NRŌLR0296FCZZ	EU	AQ	N	C	ハイシローラー	Delivery roller
	33	NSFTZ0514FCZZ	DQ	AF	N	C	ツメヨウジク (B)	Pawl shaft (B)
	34	XXXSP30L06000	DB	AA		C	ビス	Wormscrew
	35	PTME−0079FCZZ	DY	AK		C	ハクリツメ E	Separator pawl (E)
	36	MSPRC0698FCZZ	DB	AB	N	B	ハクリツメバネ(D)	Separator pawl spring (D)
⚠	37	RLMPU0142FCZZ	GV	BD		A	ヒーターランプ	Heater lamp (100V)
⚠		RLMPU0143FCZZ	GV	BD		A	ヒーターランプ	Heater lamp (110V)
⚠		RLMPU0144FCZZ	GV	BD		A	ヒーターランプ	Heater lamp (120V)
⚠		RLMPU0145FCZZ	GV	BD		A	ヒーターランプ	Heater lamp (200V)
⚠		RLMPU0147FCZZ	GV	BD	N	A	ヒーターランプ	Heater lamp (240V)
⚠		RLMPU0185FCZZ	GV	BD		A	ヒーターランプ	Heater lamp (127V)
	38	LFRM−0209FCZZ	DZ	AK	N	C	ヒーターフレーム F	Heater frame (F)
	39	JKNBZ0052FCZZ	DB	AB		C	ローラーカイテンツマミ	Roller knob
	40	CCŌVQ0396FC01	FT	AW	N	C	テイチャクカバー	Fusing cover (Japans)
		CCŌVQ0396FC02	FT	AW	N	C	テイチャクカバー	Fusing cover (English)
		CCŌVQ0396FC03	FT	AW	N	C	テイチャクカバー	Fusing cover (E.T.G.S)
	41	CGiDH0457FC01	FL	AV	N	C	ペーパーガイドF	Paper guide (F)
	42	PWiR−0076FCZZ	DM	AE	N	C	レバーヨウワイヤー	Lever wire
	44	QSLPA0059FCZZ	DD	AC	N	C	ヒーターデンキョク F	Heater electrode (F)
	45	LHLDZ0441FCZZ	DX	AH	N	C	デンキョクホルダーF	Electrode holder (F)
	46	CLEVP0249FC01	EH	AN	N	C	アツカイレバー AS	Pressure release lever
	47	CANGF0961FC01	DS	AG	N	C	デンゲンスイッチアングル	Power swich angle
	48	LX−BZ0180FCZZ	DA	AA	N	C	ビス	Screw
	49	CFLT−0026FC01	FK	AU	N	B	ローラークリーナー	Roller cleaner
	50	LX−WZ0116FCZZ	DB	AB	N	C	ワッシャー	Washer

19 定着ユニット (Fusing unit)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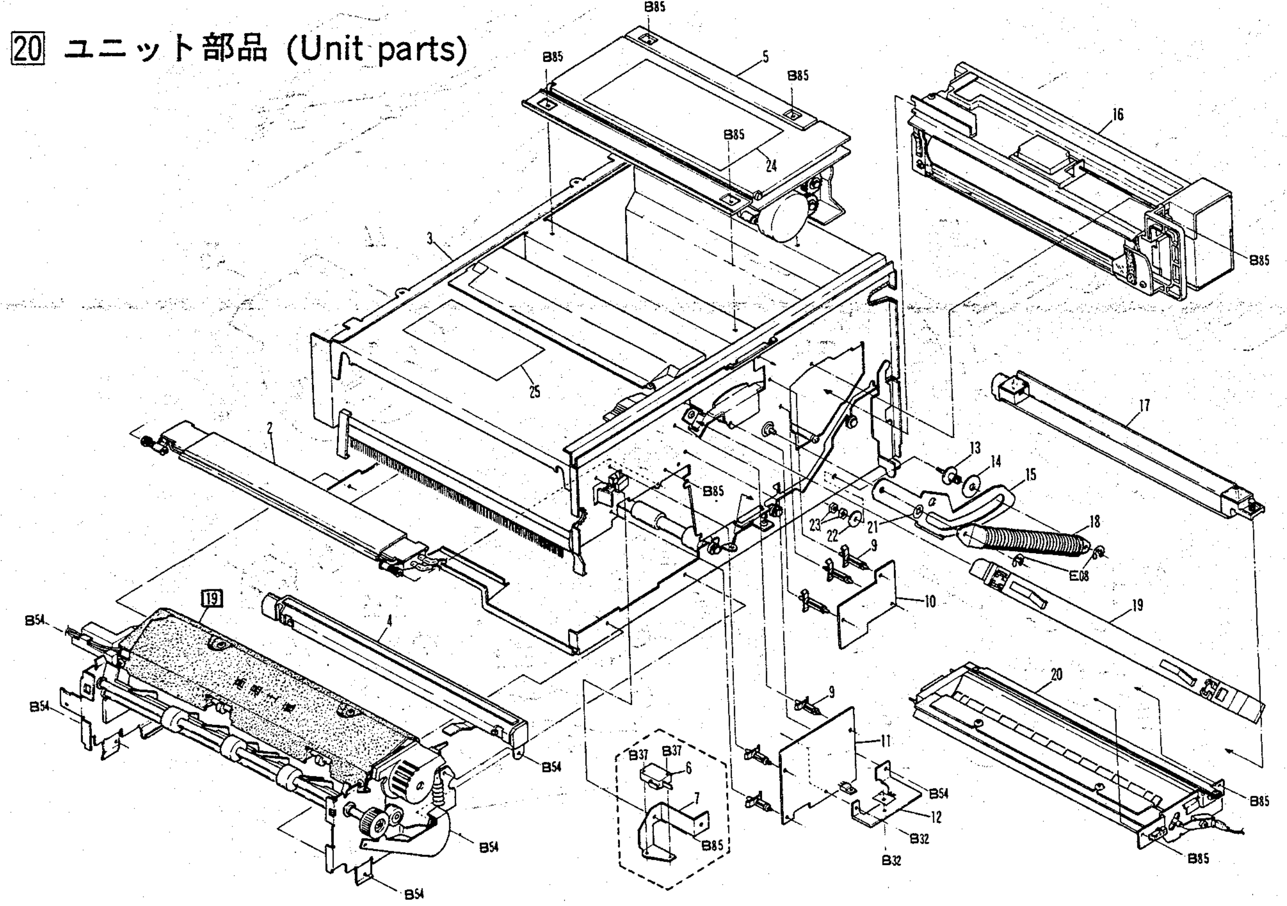
20 ユニット部品 (Unit parts)

	NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION	
			Ja	Ex				
	2	CREFL0054FC52	HC	BE	N	C	ジョデンランプユニット	Discharge lamp unit (Japan)
		CREFL0054FC53		BB	N	C	ジョデンランプユニット	Discharge lamp unit (Export)
	3	CFRM-0204FC01	FR	AW	N	C	ウエフレームFAS	Upper frame F
	4	CCASZ0081FC51	FN	AV	N	E	DCケースユニット	DC case unit (Japan)
		CCASZ0081FC52		AT	N	E	DC ケースユニット	DC Case unit (Export)
⚠	5	CBÕXZ0052FC51	HN	BG	N	E	トナーボックス	Toner box unit (50Hz)
⚠		CBÕXZ0052FC52	HN	BG	N	E	トナーボックス	Toner box unit (60Hz)
	6	QSW-M0154FCZZ	DY	AH		A	マイクロスイッチ	Microswitch
	7	LANGT0958FCZZ	DG	AD	N	C	オープンスイッチ アングル	Open switch angle
	8	――――						
	9	LSUPP0026FCZZ	DB	AB	N	C	サポーター	Holder
⚠	10	CPWBF0280FC51	FW	AX	N	E	リレーキバンユニット	Relay PWB unit (100Vseries)
⚠		CPWBF0280FC52	FW	AX	N	E	リレーキバンユニット	Relay PWB unit (200Vseries)
⚠	11	CPWBF0276FC51	HJ	BG	N	E	CLRキバン	CLR PWB unit (100Vseries/50Hz)
⚠		CPWBF0276FC52	HJ	BG	N	E	CLRキバン	CLR PWB unit (100Vseries/60Hz)
⚠		CPWBF0276FC53	HJ	BG	N	E	CLRキバン	CLR PWB unit (200V series/50Hz)
⚠		CPWBF0276FC54	HJ	BG	N	E	CLRキバン	CLR PWB unit (200V series/60Hz)
⚠		CPWBF0276FC55	HJ	BG	N	E	CLRキバン	CLR PWB unit (220V/50Hz)
⚠		CPWBF0276FC56	HJ	BG	N	E	CLRキバン	CLR PWB unit (110V/50Hz)
⚠		CPWBF0276FC57	HJ	BG	N	E	CLRキバン	CLR PWB unit (100V series/60Hz)
	12	PRDAR0022FCZZ	DF	AD	N	C	チョウコウホウネツバン	Heat sink
	13	LBÕSZ0550FCZZ	DW	AH	N	C	ブンリコテイボス C	Boss C
	14	LX-WZ0112FCZZ	DA	AA	N	C	ブンリボスC ワッシャ	Washer
	15	LPLTM1059FCZZ	DZ	AK	N	C	ブンリロックバン	Separator lock plate
	16	CBÕXZ0051FC51	RJ	BV	N	E	DVボックスユニット	DV Box unit
	17	CCASZ0080FC52	FP	AN	N	E	TCケース ユニット	TC case ass'y
	18	MSPRC0652FCZZ	EW	AR	N	B	バランサー	Balancer spring
	19	CCASZ0079FC51	GA	AY	N	E	MCケースユニット	MC case unit
⚠	20	CREFL0056FC31	TX	BZ	N	C	コウガクユニット	Optical unit (100V series Japan)
⚠		CREFL0056FC32	TW	BZ	N	C	コウガクユニット	Optical unit (200V series)
⚠		CREFL0056FC33	TW	BZ	N	C	コウガクユニット	Optical unit (100V series Except U.S.A,Canada)
⚠		CREFL0056FC34	TX	BZ	N	C	コウガクユニット	Optical unit (100V series U.S.A,Canada)
	21	TLABZ0892FCZZ	DB	AB	N	C	ブンリロックバンヨウラベル	Label
	22	LX-WZ0111FCZZ	DB	AB	N	C	ブンリョウワッシャ C	Washer
	23	LX-NZ0026FCZZ	DA	AA	N	C	ナット	Nut
	24	TLABH0868FCZZ	DG	AD	N	C	トナー ホキュウ ラベル	Label
	25	TLABH0865FCZZ	DM	AE	N	C	ホンタイ カイヘイ ラベル	Label(Japan)
		TLABH0866FCZZ		AE	N	C	ホンタイ カイヘイ ラベル	Label(E)
		TLABH0867FCZZ		AE	N	C	ホンタイ カイヘイ ラベル	Label(E,F,G,S)

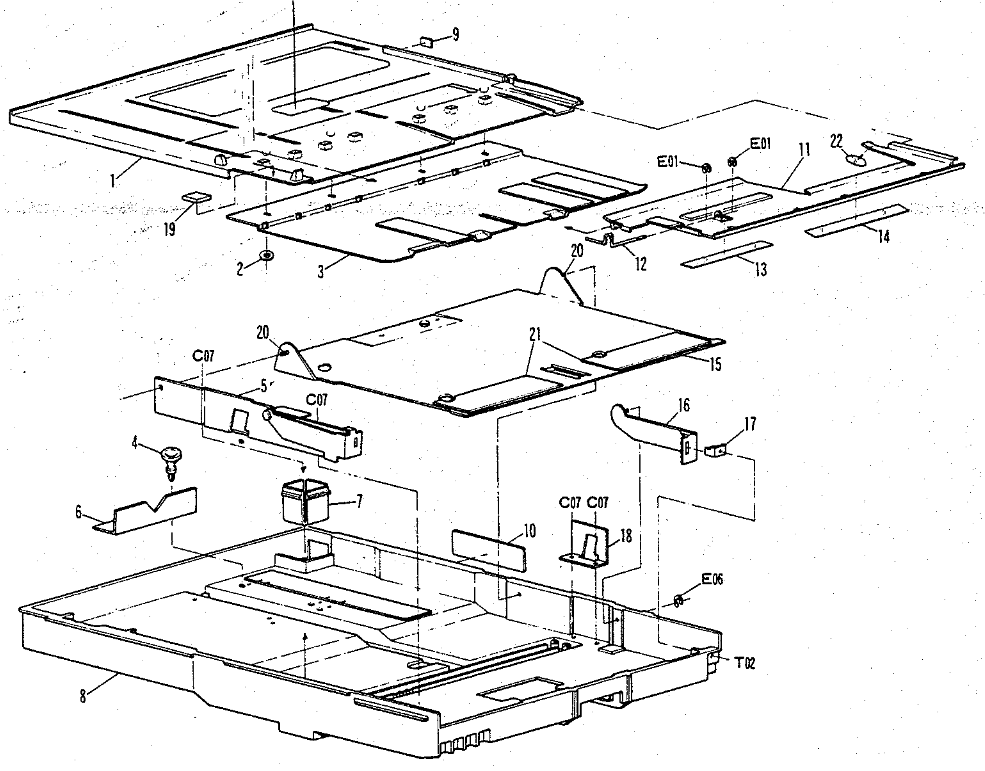
20 ユニット部品 (Unit parts)



21 カセット (Cassette)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION	
		Ja	Ex				
1	CFTA-0022FC01	FS	AW	N	D	カセットフタ (コクナイ)	Cassette cover (Japan)
	CFTA-0022FC02	FS	AW	N	D	カセット フタ	Cassette cover(AB series(E))
	CFTA-0022FC03	FP	AW	N	D	カセット フタ	Cassette cover(inch series(E))
	CFTA-0022FC04	FS	AW	N	D	カセット フタ	Cassette cover(AB series(E,F,G,S))
	CFTA-0022FC05	FP	AW	N	D	カセット フタ	Cassette cover(inch series(E,F,G,S))
	CFTA-0023FC02	FL	AU	N	D	カセット フタ	Cassette cover(AB series(E))
2	LX-WZ0064FCZZ	DA	AA		C	ワッシャ	Washer
3	PGiDH0466FCZZ	EJ	AN	N	C	テザシガイド	Manual feed guide
4	LBSHZ0087FCZZ	DH	AD		C	ナイラツチ	Stopper
5	CPLTM1075FC01	EB	AL	N	C	UCカセットソクバンRAS	UC cassette angle R
6	LSTPP0087FCZZ	DD	AC		C	カセットストッパーB	Cassette stopper B
7	HiNDP0120FCZZ	DL	AE	N	D	サイズヒョウジ Bレツ	Size disply (B series)
	HiNDP0121FCZZ		AF	N	D	サイズ ヒョウジ	Size display (inch series)
	HiNDP0122FCZZ	DL	AE	N	D	サイズ ヒョウジ	Size display (universal)
	HiNDP0123FCZZ	DU	AG	N	D	サイズ ヒョウジ	Size display (A series)
8	GCASP0047FCZZ	FQ	AW	N	D	カセットホンタイ	Cassette case
	GCASP0048FCZZ	FP	AW	N	D	カセットホンタイ (A4)	Cassette case (A4 Cassette)
9	TLABZ0882FCZZ	DA	AA	N	C	テザシイチラベル B	Manual feed size label (B)
10	TLABZ0881FCZZ	DB	AB	N	C	テザシイチラベル A	Manual feed size label (A) (Japan)
	TLABZ0884FCZZ		AC	N	C	テザシイチラベル A	Manual feed position label A (Export)
11	CPLTM1092FC01	EN	AP	N	C	テザシボウシバンAS	Stopper plate
12	PWiR-0078FCZZ	DP	AF	N	C	ボウショウワイヤー	Stopper wire
13	PSHEP0626FCZZ	DB	AB	N	C	テザショウマイラーB	Manual feed sheet (B)
14	PSHEP0625FCZZ	DB	AB	N	C	テザショウマイラーA	Manual feed sheet (A)
15	CPLTM1063FC01	FD	AS	N	C	カセットカイテンバン (B4)	Cassette plate (B4 series)
	CPLTM1065FC01	FA	AS	N	C	カセット カイテンバン	Cassette plate (A series)
	CPLTM1066FC01		AS	N	C	カセット カイテンバン	Cassette plate (LT series)
16	CTME-0085FC01	DQ	AF	N	D	カセットツメF AS	Cassette pawl F
17	LANGT0753FCZZ	DB	AB	N	C	ツメイチギメカナグ	Pawl adjusting plate
18	LPLTM1074FCZZ	DE	AC	N	C	UCカセットソクバンF	UC.Cassette angle F
19	PSHEZ0671FCZZ	DA	AA		C	テザシホジョマイラー	Sheet
20	NSFTZ0348FCZZ	DD	AC		C	カイテンバン シテンシャフト	Rotating plate shaft
21	PSHEZ0538FCZZ	DL	AE	N	C	カイテンバンシート	Rotating plate sheet
22	PSHEP0656FCZZ	DB	AB	N	C	テザシホジョマイラー C	Sheet C
23	PSHEP0627FCZZ	DF	AD	N	C	カセットヨウシート	Cassette sheet
	ユニット (Unit)						
901	CCASP0047FC51	LH	BM	N	E	カセット	Cassette ass'y (Japan)
902	CCASP0047FC52		DH	N	E	カセット	Cassette ass'y (inch series(E,F))
903	CCASP0047FC53		DH	N	E	カセット	Cassette ass'y (universal(AB),(E))
904	CCASP0047FC54		DH	N	E	カセット	Cassette ass'y (universal(inch),(E,F))
905	CCASP0047FC55		DH	N	E	カセット	Cassette ass'y (universal(AB),(E,F,G,S))
906	CCASP0048FC53		BG	N	E	カセット	Cassette ass'y (A4 Cassette)

21 カセット (Cassette)



22 その他 部品 (Other parts)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION	
		Ja	Ex				
1	CCASZ0067FC02	DC	AB		D	メンテナンスカード(J)	Maintenance card (Japan)
	CCASZ0067FC01	DH	AD		D	メンテナンスカード(EX)	Maintenance card (Export)
2	CPAKA0902FC01	FQ	AW	N	D	ソコケース	Bottom case ass'y
3	GCÕVZ0112FCZZ	EW	AR		D	ダストカバー	Dust cover
4	LSÕU−0043FCZZ	EU	AQ	N	D	トレー	Original tray
5	PBRSR0012FCZZ	DL	AE		D	チャージャーブラシ	Charger brush
6	PSHEZ0603FCZZ	DE	AC	N	D	ポリシート	Packing sheet
7	SPAKC0898FCZZ	FC	AS	N	D	コウポウユニット	Packing unit
8	SPAKA0899FCZZ	ET	AQ	N	D	パッキング AD	Packing AD
9	SPAKC0906FCZZ	EK	AN	N	D	パッキングケース(J)	Packing case (Japan)
10	SSAKH0011MCZZ	DB	AA		D	ポリブクロ	Vinyl bag (380×420 30U)
11	SSAKA0002FCZZ	DA	AA		D	ポリブクロ	Vinyl bag (300×420 30U)
12	SSAKA0019SCZZ	DA	AA		D	ポリブクロ	Vinyl bag (120×180 30U)
13	TCADZ0214FCZZ	DD	AC		D	メンテナンスカード(J)	Maintenance card (Japan)
14	TCADZ0215FCZZ	DW	AH	N	D	ホシュアンナイショ	Japan only
15	TCADS0216FCZZ	DW	AH	N	D	ノウニュウセッチ	Installation report (Japan)
16	TCADZ0217FCZZ	DB	AB	N	D	セッチチュウイ(コクナイ)	Japan only
17	TiNSJ0341FCZZ	FU	AM	N	D	トリアツカイセツメイショ(J)	Instruction book (Japan)
18	TLSTS1006CCZZ	DA	AA		D	サービス リスト	(Japan type only)
19	UCLEZ0009FCZZ	DL	AE		D	チャージャークリーナー	Charger cleaner
20	UCLE−0027FCZZ	DF	AD		D	SLクリーナー	SL cleaner
21	UKÕG−0078FCZZ	DC	AC		D	カミジヨウゴ	Funnel
22	TCADS0162FCZZ		AG	N	D	ノウニュウ セッチカード	Installation report (E)
23	TCADS0163FCZZ		AP	N	D	ノウニュウ セッチカード	Installation report (E,F,G,S)
24	TCADZ0194FCZZ		AB	N	D	メンテナンス カード	Maintenance card (Export)
25	TCADZ0219FCZZ		AD	N	D	セッチ チュウイショ	Caution card (E,F,G,S)
26	TiNSE0343FCZZ	EM		N	D	トリアツカイセツメイショ	Instruction book (Japan)
27	TiNSF0344FCZZ		AQ	N	D	トリアツカイセツメイショ	Instruction book (France)
28	TiNSG0345FCZZ		AS	N	D	トリアツカイセツメイショ	Instruction book (SEEG)
29	TiNSS0346FCZZ		AS	N	D	トリアツカイセツメイショ	Instruction book (Spain)
30	TLABZ0914FCZZ		AG	N	D	ソウサセツメイラベル E	Instruction label (E)
31	TLABZ0915FCZZ		AG	N	D	ソウサセツメイラベル	Instruction label (E,F,G,S)

23 メイン基板 ユニット (Main PWB unit)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION	
		Ja	Ex				
1	LX−NZ0032FCZZ	DB	AA		C	ナット	Nut
2	PCOVW0399FCZZ	DF	AD	N	C	メモリーキバンカバー	Memoly PWB cover
3	QCNCM0047FCZZ	DH	AD		C	コネクター	Connector (7P)
4	QCNCM0049FCZZ	DH	AD		C	コネクター	Connector (9P)
5	QCNCM0076FCZZ	DQ	AF	N	C	コネクター	Connector (13P)
6	QCNCM0089FCZZ	DH	AD	N	C	コネクター	Connector (11P)
7	QCNCM0090FCZZ	DH	AE	N	C	コネクター	Connector (16P)
8	RC−CZ0111FCZZ	DL	AF		C	クリスタル ハッシンシ	Oscillator (4MHz)
9	RC−CZ0112FCZZ	DH	AD		C	トリマコンデンサー	Trima capacitor
10	RC−QZ0117FCZZ	DH	AD		C	コンデンサー	Capacitor (0.47μF)
11	RR−CZ1003CCZZ	DA	AA	N	C	テイコウ	Resistor (1/4W 10Ω)
12	RR−DZ0025FCZZ	DD	AC		C	ブロックテイコウ	Block resistor (15KΩ×4)
13	RR−DZ0097FCZZ	DD	AC	N	C	テイコウ	Resistor
14	RR−DZ0098FCZZ	DH	AD	N	C	テイコウ	Resistor
15	RR−DZ0132FCZZ	DS	AG	N	C	テイコウ	Resistor
16	RR−DZ0139FCZZ	DH	AC		C	ブロックテイコウ	Block resistor (5.6KΩ×4)
17	RR−DZ0140FCZZ	DD	AC	N	C	テイコウ	Resistor (5.6KΩ×3)
18	RR−DZ0144FCZZ	DD	AC	N	C	テイコウ	Resistor
19	RR−DZ0195FCZZ	DB	AB	N	C	テイコウ	Resistor (1MΩ ±1%)
20	RR−DZ0196FCZZ	DC	AB	N	C	テイコウ	Resistor
21	RR−DZ0197FCZZ	DD	AC	N	C	テイコウ	Resistor
22	RR−DZ0198FCZZ	DD	AC	N	C	テイコウ	Resistor
23	RR−NZ0165FCZZ	DA	AA	N	C	テイコウ	Resistor
24	UBATL0003FCZZ	EC	AL	N	S	バッテリー	Battery (3V)
25	VCEAAU1EW106Q	DB	AC		C	コンデンサー	Capacitor (25WV 10μF)
26	VCEAAU1VW476Q	DB	AC		C	コンデンサー	Capacitor (35WV 47μF)
27	VCKYPU1HB102K	DA	AA		C	コンデンサー	Capacitor (50WV 1000pF)
28	VCKYPU1HF223Z	DB	AA		C	コンデンサー	Capacitor (50WV 0.022μF)
29	VCQYKU1HM104M	DD	AB		C	コンデンサー	Capacitor (50WV 0.10μF)
30	VCQYKU1HM222M	DB	AB	N	C	コンデンサー	Capacitor (50WV 2200pF)
31	VCSATU1CE225M	DH	AD	N	C	コンデンサー	Capacitor (16WV 2.2μF)
32	VCSATU1VE224M	DH	AC	N	C	コンデンサー	Capacitor (35WV 0.22μF)
33	VHDDS1588L2−1	DB	AB		B	ダイオード	Diode
34	VHDW06B////−1	DH	AE		B	ダイオード	Diode
35	VHEEZ062///−1	DD	AC		B	ツェナーダイオード	Zener diode
36	VHERD24E3//−1	DB	AC		B	ツェナーダイオード	Zener diode
37	VHERD5.1EB/−1	DH	AD		B	ツェナダイオード	Zener diode
38	VHEYZ055C//−1	DD	AC		B	ツェナーダイオード	Zener diode
39	VHiD7801G−122	GF	AZ	N	B	LSI	LSI
40	VHiHD44700A06	FL	AU	N	B	IC	IC
41	VHiM54514P/−1	DS	AH	N	B	IC	IC
42	VHiM54526P/−1	DS	AH		B	IC	IC
43	VHiM54533P/−1	DY	AH		B	IC	IC
44	VHiM54537P/−1	DS	AH		B	IC	IC
45	VHiNJM2901N−1	EB	AK	N	B	IC	IC
46	VHiNJM2904D−1	DS	AG	N	B	IC	IC
47	VHiUPD4011B−1	DL	AF	N	B	IC	IC
48	VHPGL3AR1//−1	DH	AD		B	LED	LED
49	VRD−ST2EY103J	DA	AA		C	テイコウ	Resistor (1/4W 10KΩ ±5%)
50	VRD−ST2EY121J	DA	AA	N	C	テイコウ	Resistor (1/4W 120Ω ±5%)
51	VRD−ST2EY122J	DA	AA		C	テイコウ	Resistor (1/4W 1.2KΩ ±5%)
52	VRD−ST2EY183J	DB	AA		C	テイコウ	Resistor (1/4W 18KΩ ±5%)
53	VRD−ST2EY221J	DA	AA		C	テイコウ	Resistor (1/4W 220Ω ±5%)
54	VRD−ST2EY223J	DA	AA		C	テイコウ	Resistor (1/4W 22KΩ ±5%)
55	VRD−ST2EY332J	DA	AA		C	テイコウ	Resistor (1/4W 3.3KΩ ±5%)
56	VRD−ST2EY471J	DA	AA		C	テイコウ	Resistor (1/4W 470Ω ±5%)
57	VRD−ST2EY472J	DA	AA		C	テイコウ	Resistor (1/4W 4.7KΩ ±5%)
58	VRD−ST2EY473J	DA	AA		C	テイコウ	Resistor (1/4W 47KΩ ±5%)
59	VRD−ST2EY565J	DA	AA		C	テイコウ	Resistor (1/4W 5.6MΩ ±5%)
60	VRD−ST2EY682J	DB	AA		C	テイコウ	Resistor (1/4W 6.8KΩ ±5%)
61	VRD−ST2HY361J	DA	AA	N	C	テイコウ	Resistor (1/2W 360Ω ±5%)
62	VRN−RT2EK394F	DB	AB		C	テイコウ	Resistor (1/4W 390KΩ ±1%)
63	VRN−RT2EK433F	DA	AA	N	C	テイコウ	Resistor (1/4W 43KΩ ±1%)
64	VRN−RT2EK473F	DB	AB		C	テイコウ	Resistor (1/4W 47KΩ ±1%)
65	VRN−RT2EK513F	DD	AB	N	C	テイコウ	Resistor (1/4W 51KΩ ±1%)
66	VRN−RT2EK562F	DD	AC		C	テイコウ	Resistor (1/4W 5.6KΩ ±1%)
67	VRN−RT2EK682F	DH	AB		C	テイコウ	Resistor (1/4W 6.8KΩ ±1%)
68	VRN−RT2EK912F	DD	AC		C	テイコウ	Resistor (1/4W 9.1KΩ ±1%)
69	VRS−ST3DB201J	DB	AB	N	C	テイコウ	Resistor (2W 200Ω ±5%)
70	VRS−ST3DB430J	DB	AB	N	C	テイコウ	Resistor (2W 43Ω ±5%)
71	VS2SA733−//−1	DH	AD		B	トランジスター	Transistor
72	VS2SC1061−C−1	DY	AH		B	トランジスター	Transistor
73	VS2SC945///−1	DH	AD		B	トランジスター	Transistor
	ユニット (Unit)						
901	CPWBN0284FC51	TB	BW	N	E	メインキバン ユニット	Main PWB unit

24 操作基板 ユニット (Control PWB unit)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION	
		Ja	Ex				
2	QSW−P0208FCZZ	DC	AB	N	B	プッシュスイッチ	Push switch
3	VHDDS1588L2−1	DB	AB		B	ダイオード	Diode
4	VHPGL3EG7//−1	DC	AB	N	B	フォトトランジスター	Photo transistor
5	VHPGL3HD7//−1	DD	AC		B	フォトトランジスター	Photo transistor
6	VHPGL6E201/−1	ET	AQ		B	LED	LED
7	VRD−ST2EY562J	DB	AA		C	テイコウ	Resistor (1/4W 5.6KΩ ±5%)
	ユニット (Unit)						
901	CPWBE0278FC51	HV	BK	N	E	ソウサキバンユニット	Operation PWB unit

25 レディランプ 基板ユニット (Ready lamp PWB unit)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION	
		Ja	Ex				
1	RLMPM5490QCN1	DH	AE		A	ランプ	Lamp
2	VRS−ST3DB430J	DB	AB		C	テイコウ	Resistor (2W 43Ω ±5%)
	ユニット (Unit)						
901	CPWBE0279FC51	EA	AK	N	E	RPLキバンユニット	RPL PWB unit

26 PT 基板ユニット (PT PWB unit)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION	
		Ja	Ex				
1	LANGT0948FCZZ	DC	AB	N	C	フォトトリツケアングル	PT fixing plate
2	QCNCM0054FCZZ	DH	AC		C	コネクター	Connector (5P)
4	QSW−L0205FCZZ	DN	AF	N	A	リードスイッチ	Reed switch
5	VCKYPU1HF223Z	DB	AA		C	コンデンサー	Capacitor (50WV 0.022μF)
6	VHPEESM3B//−1	EG	AN		B	フォトトランジスター	Photo transistor
7	VRD−ST2EY132J	DA	AA		C	テイコウ	Resistor (1/4W 1.3KΩ ±5%)
	ユニット (Unit)						
901	CPWBF0281FC51	FC	AS	N	E	PTキバン ユニット	PT PWB unit

27 コピーランプ レギュレーター 基板ユニット (CL-Regulator PWB unit)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION	
		Ja	Ex				
1	PRDAR0022FCZZ	DF	AD	N	C	チョウコウホウネツバン	Heat sink
2	PSHEG0316FCZZ	DB	AB		C	ゼツエンスペーサー B	Insulator B
3	QCNCM0043FCZZ	DB	AB		C	コネクター	Connector (3P)
4	QCNCM0044FCZZ	DD	AC		C	コネクター	Connector (4P)
5	QCNCM0080FCZZ	DH	AD	N	C	コネクター	Connector (4P)
6	RC−QZ0117FCZZ	DH	AD		C	コンデンサー	Capacitor (0.47μF)
⚠ 7	RCiLF0009FCZZ	EG	AN		C	ノイズフィルターコイル	Noise filter coil
⚠	RCiLF0025FCZZ		AP	N	C	ノイズフィルターコイル	Noise filter coil (SEEG)
8	RMPTA0017FCZZ	DK	AE	N	B	ブロックテイコウ	Block resistor
9	RR−DZ0104FCZZ	DS	AG		C	ブロックテイコウ	Block resistor
10	RR−DZ0107FCZZ	DD	AC		C	ブロックテイコウ	Block resistor
11	RR−NZ0167FCZZ	DH	AD		C	ブロックテイコウ	Block resistor
12	RR−XZ0102FCZZ	DH	AD		B	ヒューズテイコウ	Fuse resistor (100V series)
13	RTRNL0181FCZZ	DY	AH		B	パルストランス	Pulse transformer
14	RVR−MD320QCZZ	DJ	AE		B	ボリウム	Variable resistor
15	VCEAAU1VW107Q	DD	AC		C	コンデンサー	Capacitor (35WV 100μF)
16	VCQYKU1HM102K	DB	AA	N	C	コンデンサー	Capacitor (50WV 1000pF)
17	VCQYKU1HM104M	DD	AB		C	コンデンサー	Capacitor (50WV 0.10μF)
18	VCQYKU1HM333K	DB	AB		C	コンデンサー	Capacitor (50WV 0.033μF)
19	VHDDS1588L2−1	DB	AB		B	ダイオード	Diode
20	VHDSiRB40Z/−1	DS	AG		B	ダイオード	Diode
21	VHDW06B////−1	DH	AE		B	ダイオード	Diode
22	VHEYZ171///−1	DQ	AF		B	ツェナーダイオード	Zener diode
23	VHiUPC324C/−1	EC	AL		B	IC	IC
24	VHPPC714///−1	DS	AG		B	LED	LED
25	VHSAC12DiM/−1	EG	AM		B	サイリスター	Thyristor (100V series)
26	VRD−ST2EY102J	DB	AA		C	テイコウ	Resistor (1/4W 1KΩ ±5%)
27	VRD−ST2EY103J	DA	AA		C	テイコウ	Resistor (1/4W 10KΩ ±5%)
28	VRD−ST2EY272J	DA	AA		C	テイコウ	Resistor (1/4W 2.7KΩ ±5%)
29	VRD−ST2EY305J	DA	AA		C	テイコウ	Resistor (1/4W 3.0MΩ ±5%)
30	VRD−ST2EY473J	DA	AA		C	テイコウ	Resistor (1/4W 47KΩ ±5%)
31	VRN−RT2EK103F	DH	AB		C	テイコウ	Resistor (1/4W 10KΩ ±1%)
32	VRN−RT2EK204F	DB	AB		C	テイコウ	Resistor (1/4W 200KΩ ±1%)
33	VRN−RT2EK273F	DD	AC	N	C	テイコウ	Resistor (1/4W 27KΩ ±1%)
34	VRN−RT2EK622F	DB	AB		C	テイコウ	Resistor (1/4W 6.2KΩ ±1%)
35	VRS−ST3DB223J	DB	AB		C	テイコウ	Resistor (2W 22KΩ ±5%)

27 コピーランプ レギュレーター 基板ユニット (CL-Regulator PWB unit)

	NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION	
			Ja	Ex				
	36	VS2SC945///-1	DH	AD		B	トランジスター	Transistor
	37	VS2SD592ANR-1	DH	AD		B	トランジスター	Transistor
	38	XBPSD30P18K00	DA	AA		C	ビス	Screw
		ユニット (Unit)						
⚠	901	CPWBF0276FC51	HJ	BG	N	E	CLRキバン	CLR PWB unit (100Vseries/50Hz)
⚠		CPWBF0276FC52	HJ	BG	N	E	CLRキバン	CLR PWB unit (100Vseries/60Hz)
⚠		CPWBF0276FC53	HJ	BG	N	E	CLRキバン	CLR PWB unit (200Vseries/50Hz)
⚠		CPWBF0276FC54	HJ	BG	N	E	CLRキバン	CLR PWB unit (200Vseries/60Hz)
⚠		CPWBF0276FC55	HJ	BG	N	E	CLRキバン	CLR PWB unit (220V/50Hz)
⚠		CPWBF0276FC56	HJ	BG	N	E	CLRキバン	CLR PWB unit (110V/50Hz)
⚠		CPWBF0276FC57	HJ	BG	N	E	CLRキバン	CLR PWB unit (100Vseries/60Hz)

28 DC電源 基板ユニット (DC Power supply PWB unit)

	NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION	
			Ja	Ex				
	1	LSUPP0002FCZZ	DD	AC		C	サポーター	Supporter
	2	PRDAR0021FCZZ	DW	AH	N	C	デンゲンキホルダー	Power supply holder
	3	PSHEG0315FCZZ	DB	AB		C	ゼツエンスペーサーA	Insulator
	4	PSHEG0316FCZZ	DB	AB		C	ゼツエンスペーサーB	Insulator
	5	PSPAZ1043CCZZ	DB	AB		C	ブッシュ	Grommet
	6	QCNCM0043FCZZ	DB	AB		C	コネクター	Connector (3P)
	7	QCNCM0047FCZZ	DH	AD		C	コネクター	Connector (7P)
	8	QCNCM0079FCZZ	DD	AC		C	コネクター	Connector (3P)
	9	QFS-A0046FCZZ	DB	AB		A	ヒューズ	Fuse (5A)
	10	QFS-D2002WCZZ	DD	AB		A	ヒューズ	Fuse (2A)
	11	QFS-A3003CCZZ	DD	AB		A	ヒューズ	Fuse (0.5A)
	12	QFSHA1002CCZZ	DB	AB		C	ヒューズ ホルダー	Fuse holder
	13	RC-EZ0118FCZZ	EM	AP	N	C	コンデンサー	Capacitor (50WV 6800μF)
⚠	14	RMPTA0017FCZZ	DK	AE		B	ブロックテイコウ	Block resistor (100V)
⚠		RMPTA0018FCZZ	DK	AE	N	B	ブロックテイコウ	Block resistor (200V Export)
	15	RR-DZ0101FCZZ	DH	AD		C	ブロックテイコウ(コクナイ)	Block resistor (Japan only)
	16	RTRNL0181FCZZ	DY	AH		B	パルストランス	Pulse transformer
	17	VCEAAU1VW476Q	DB	AC		C	コンデンサー	Capacitor (35WV 47μF)
	18	VCKYPU1HF223Z	DB	AA		C	コンデンサー	Capacitor (50WV 0.022μF)
	19	VCQYKU1HM473K	DB	AB		C	コンデンサー	Capacitor (50WV 0.047μF)
	20	VCSATU1HE475K	DQ	AM	N	C	コンデンサー	Capacitor (50WV 4.7μF)
	21	VHDDS1588L2-1	DB	AB		B	ダイオード	Diode
	22	VHDS5VB10//-1	EM	AP		B	ダイオード	Diode
	23	VHDW06B////-1	DH	AE		B	ダイオード	Diode
	24	VHERD5.6E6/-1	DH	AC		B	ツェナーダイオード	Zener diode
	25	VHEYZ108///-1	EC	AE		B	ツェナーダイオード	Zener diode
	26	VHERD27EL2/-1	DB	AB	N	B	ツェナーダイオード	Zener diode
	27	VHPGL3AR1//-1	DH	AD		B	LED	LED
	28	VRD-ST2EY103J	DA	AA		C	テイコウ	Resistor (1/4W 10KΩ ±5%)
	29	VRD-ST2EY122J	DA	AA		C	テイコウ	Resistor (1/4W 1.2KΩ ±5%)
	30	VRD-ST2EY153J	DA	AA		C	テイコウ	Resistor (1/4W 15KΩ ±5%)
	31	VRD-ST2EY183J	DB	AA		C	テイコウ	Resistor (1/4W 18KΩ ±5%)
	32	VRD-ST2EY222J	DA	AA		C	テイコウ	Resistor (1/4W 2.2KΩ ±5%)
	33	VRD-ST2EY223J	DA	AA		C	テイコウ	Resistor (1/4W 22KΩ ±5%)
	34	VRD-ST2EY242J	DA	AA		C	テイコウ	Resistor (1/4W 2.4KΩ ±5%)
	35	VRD-ST2EY473J	DA	AA		C	テイコウ	Resistor (1/4W 47KΩ ±5%)
	36	VRD-ST2EY511J	DB	AA		C	テイコウ	Resistor (1/4W 510Ω ±5%)
	37	VRD-ST2EY682J	DB	AA		C	テイコウ	Resistor (1/4W 6.8KΩ ±5%)
	38	VRD-ST2EY752J	DA	AA		C	テイコウ(コクナイ)	Resistor (Japan only) (1/4W 7.5KΩ ±5%)
	39	VRD-ST2EY753J	DA	AA		C	テイコウ(コクナイ)	Resistor (Japan only) (1/4W 75KΩ ±5%)
	40	VRD-ST2EY822J	DB	AA		C	テイコウ(コクナイ)	Resistor (Japan only) (1/4W 8.2KΩ ±5%)
	41	VRD-ST2EY912J	DA	AA	N	C	テイコウ	Resistor (1/4W 9.1KΩ ±5%)
	42	VRS-ST3AB152J	DB	AB	N	C	テイコウ	Resistor (1W 1.5KΩ ±5%)
	43	VS2SA733-//-1	DH	AD		B	トランジスター	Transistor
	44	VS2SC1826-GBC	DQ	AF		B	トランジスター	Transistor
	45	VS2SC2578-/-S	DY	AH	N	B	トランジスター	Transistor
	46	VS2SC945///-1	DH	AD		B	トランジスター	Transistor
	47	VS2SD592ANR-1	DH	AD		B	トランジスター	Transistor
	48	VRD-ST2EY102J	DB	AA		C	テイコウ	Resistor (1/4W 1KΩ ±5% Export)
	49	VRD-ST2EY333J	DA	AA		C	テイコウ	Resistor (1/4W 33KΩ ±5% Export)
	50	VRD-ST2EY5R6J	DA	AA		C	テイコウ	Resistor (1/4W 5.6Ω ±5% Export)
	51	VRD-ST2EY753J	DA	AA		C	テイコウ	Resistor (1/4W 75KΩ ±5% Export)
		ユニット (Unit)						
⚠	901	CPWBF0277FC51	HV	BK	N	E	DCキバンユニット(100V)	Power supply PWB unit (100V japan only)
⚠		CPWBF0277FC52	HV	BK	N	E	DCキバンユニット (200V)	Power supply PWB unit (200V Export)

29 ノイズフィルター 基板 (Noise filter PWB unit)

	NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION	
			Ja	Ex				
	1	PHŌG−0081FCZZ	DB	AB		C	ホルダー	2P holder
		PHŌG−0084FCZZ	DB	AB		C	ホルダー	4P Holder
	2	PSHEZ0595FCZZ	DD	AC	N	C	NFゼツエンシートA	Sheet A (Except,SEEG,U.Kingdom,S.Africa)
		PSHEZ0596FCZZ	DP	AF	N	C	NFゼツエンシートB	Sheet B (SEEG,U.Kingdom,S.Africa)
	3	QSŌCN0021FCZZ	DA	AA		C	ソケット	Socket
	4	QTANP0046FCZZ	DA	AA		C	タンシ	Terminal
	5	RC−KZ0046FCZZ	DH	AE		C	コンデンサー	Capacitor (4700pF 125V)
		RC−KZ0049FCZZ	DL	AF		C	コンデンサー	Capacitor (4700pF 250V)
		RC−KZ0100FCZZ	DQ	AF		C	コンデンサー	Capacitor (0.01μF 125V)
	6	RC−QZ0022FCZZ	DY	AK		C	コンデンサー	Capacitor (0.22μF 125V)
		RC−QZ0188FCZZ	DQ	AF	N	C	コンデンサー	Capacitor (0.22μF 250V)
	7	VRD−ST2EY105J	DA	AA		C	テイコウ	Resistor (1/4W 1MΩ ±5%)
		VRD−ST2EY474J	DA	AA		C	テイコウ	Resistor (1/4W 470KΩ ±5%)(U.Kingdom,S.Africa)
	8	RCiLF0031FCZZ	EZ	AR	N	C	コイル	Coil (100μH SEEG,U.Kingdom)
	9	QPLGN0019FCZZ	DA	AA		C	プラグ	Plug
	10	RCiLF0027FCZZ	EW	AQ	N	C	コイル	Coil (1mH,SEEG)
		ユニット (Unit)						
⚠	901	CPWBF0283FC51	FJ	AT	N	E	NFキバンユニット(100V)	Noise filter PWB unit (100Vseries)
⚠		CPWBF0283FC52	FJ	AT		E	NFキバンユニット(120V)	Noise filter PWB unit (120V,U.S.A only)
⚠		CPWBF0283FC53	FJ	AT		E	NFキバンユニット(200V)	Noise filter PWB unit (200Vseries,Australia)
⚠		CPWBF0285FC51	FT	AW		E	NFキバンユニット(200V)	Noise filter PWB unit (200Vseries,u,kingdon)
⚠		CPWBF0285FC52	FT	AW		E	NFキバンユニット(220V)	Noies filter PWB unit (220V,SEEG only)

30 リレー 基板ユニット (Relay PWB unit)

	NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION	
			Ja	Ex				
	1	QCNCM0044FCZZ	DD	AC		C	コネクター	Connector (4P)
	2	QCNCM0081FCZZ	DH	AD		C	コネクター	Connector (5P)
	3	RC−KZ0046FCZZ	DH	AE		C	コンデンサー	Capacitor
	4	RMPTA0017FCZZ	DK	AE		B	ブロックテイコウ	Block resistor
	5	RRLYU0063FCZZ	EG	AM		B	リレー	Relay
		ユニット (Unit)						
⚠	901	CPWBF0280FC51	FW	AX	N	E	リレーキバンユニット	Relay PWB unit (100Vseries)
⚠		CPWBF0280FC52	FW	AX	N	E	リレーキバンユニット	Relay PWB unit (200series)

31 工具 (Tools)

NO.	PARTS CODE	PRICE RANK		NEW MARK	PART RANK	DESCRIPTION	
		Ja	Ex				
1	DHAi−0304FCZZ	FP	AV		D	デンキョクシート ハーネス	DCD sheet lead wire
2	UKŌG−0082FCZZ	ET	AP	N	D	DVチョウセイ マグネット	DV adjust magnet
3	UKŌG−0088FCZZ	DR	AG	N	D	7Pショート コネクター	7P short connector
4	UKŌGG0048FCZZ	DH	AD		D	4Pショート コネクター	4P short connector
5	UKŌGG0050FCZZ	EC	AL		D	DVチョウセイ カップ	DV measuring cup
6	UKŌGG0056FCZZ	GD	AZ		D	マスターホゴ カバー	Master protect sheet
7	UKŌGG0058FCZZ	EM	AM		D	スタビー ドライバー	Staby driver
8	UKŌGG0087FCZZ	FP	AV	N	D	デンキョク シート	DCD sheet
9	UKŌGM0102CSZZ	GQ	BC	N	D	グリップ リング プライヤー	Grip ring plier

90 ビス・ナット・ワッシャー(Hardware parts)

NO.	PARTS CODE	PRICE R.		NEW	P/R	DESCRIPTION
		Ja.	Ex.			
B01	XBPBN30P08K00	DA	AA		C	ビス Screw
B02	XBPBN30P08000	DA	AA		C	ビス Screw
B03	XBPBN30P10KS0	DA	AA		C	ビス Screw
B04	XBPBN30P10K00	DA	AA		C	ビス Screw
B05	XBPBN30P10000	DA	AA		C	ビス Screw
B06	XBPBN30P12000	DA	AA		C	ビス Screw
B07	XBPBN40P06000	DA	AA		C	ビス Screw
B08	XBPBN40P08K00	DA	AA		C	ビス Screw
B09	XBPBN40P12K00	DA	AA		C	ビス Screw
B10	XBPBN50P12000	DA	AA		C	ビス Screw
B11	XBPBZ30P08K00	DA	AA		C	ビス Screw
B12	XBPBZ30P08000	DA	AA		C	ビス Screw
B13	XBPBZ30P12KS0	DA	AA		C	ビス Screw
B14	XBPBZ40P06000	DA	AA		C	ビス Screw
B15	XBPBZ40P08K00	DA	AA		C	ビス Screw
B16	XBPBZ40P08000	DA	AA		C	ビス Screw
B17	XBPBZ40P12K00	DA	AA		C	ビス Screw
B18	XBPBZ50P06K00	DB	AB		C	ビス Screw
B19	XBPRZ30P04000	DA	AA		C	ビス Screw
B20	XBPRZ30P06000	DA	AA		C	ビス Screw
B21	XBPRZ40P06000	DA	AA		C	ビス Screw
B22	XBPRZ40P16000	DB	AA		C	ビス Screw
B23	XBPRZ40P25000	DB	AB		C	ビス Screw
B24	XBPSD30P04K00	DA	AA		C	ビス Screw
B25	XBPSD30P05K00	DA	AA		C	ビス Screw
B26	XBPSD30P05000	DA	AA		C	ビス Screw
B27	XBPSD30P06KS0	DA	AA		C	ビス Screw
B28	XBPSD30P06K00	DA	AA		C	ビス Screw
B29	XBPSD30P06000	DA	AA		C	ビス Screw
B30	XBPSD30P08KS0	DA	AA		C	ビス Screw
B31	XBPSD30P08K00	DA	AA		C	ビス Screw
B32	XBPSD30P08000	DA	AA		C	ビス Screw
B33	XBPSD30P10KS0	DA	AB		C	ビス Screw
B34	XBPSD30P10K00	DA	AA		C	ビス Screw
B35	XBPSD30P10000	DA	AA		C	ビス Screw
B36	XBPSD30P12000	DA	AA		C	ビス Screw
B37	XBPSD30P14000	DA	AA		C	ビス Screw
B38	XBPSD30P16KS0	DA	AA		C	ビス Screw
B39	XBPSD30P16K00	DA	AA		C	ビス Screw
B40	XBPSD30P16000	DA	AA		C	ビス Screw
B41	XBPSD30P18KS0	DA	AA		C	ビス Screw
B42	XBPSD30P25K00	DA	AA		C	ビス Screw
B43	XBPSD30P25000	DA	AA		C	ビス Screw
B44	XBPSD30P30000	DA	AA		C	ビス Screw
B45	XBPSD40P04000	DA	AA		C	ビス Screw
B46	XBPSD40P05K00	DA	AA		C	ビス Screw
B47	XBPSD40P06KS0	DA	AA		C	ビス Screw
B48	XBPSD40P06K00	DA	AA		C	ビス Screw
B49	XBPSD40P06000	DA	AA		C	ビス Screw
B50	XBPSD40P08KS0	DA	AA		C	ビス Screw
B51	XBPSD40P08K00	DA	AA		C	ビス Screw
B52	XBPSD40P08000	DA	AA		C	ビス Screw
B53	XBPSD40P10KS0	DA	AA		C	ビス Screw
B54	XBPSD40P10K00	DA	AA		C	ビス Screw
B55	XBPSD40P12KS0	DA	AA		C	ビス Screw
B56	XBPSD40P12K00	DA	AA		C	ビス Screw
B57	XBPSD40P14KS0	DA	AA		C	ビス Screw
B58	XBPSD40P16KS0	DA	AA		C	ビス Screw
B59	XBPSD40P16K00	DA	AA		C	ビス Screw
B60	XBPSD40P16000	DA	AA		C	ビス Screw
B61	XBPSD40P18000	DA	AA		C	ビス Screw
B62	XBPSD40P20K00	DA	AA		C	ビス Screw
B63	XBPSD40P20000	DA	AA		C	ビス Screw
B64	XBPSD40P25000	DA	AA		C	ビス Screw
B65	XBPSD40P30K00	DA	AA		C	ビス Screw
B66	XBPSD50P08K00	DA	AA		C	ビス Screw
B67	XBPSD50P10K00	DA	AA		C	ビス Screw
B68	XBPSD50P20000	DA	AA		C	ビス Screw
B69	XBPSD60P16KS0	DA	AA		C	ビス Screw
B70	XBPSD60P20000	DA	AA		C	ビス Screw
B71	XBPSF30P06KS0	DA	AA		C	ビス Screw
B72	XBPSF30P06K00	DA	AA		C	ビス Screw
B73	XBPSF30P08KS0	DA	AA		C	ビス Screw
B74	XBPSF30P08K00	DA	AA		C	ビス Screw
B75	XBPSF30P08000	DA	AA		C	ビス Screw
B76	XBPSF40P06K00	DA	AA		C	ビス Screw
B77	XBPSF40P08KS0	DA	AA		C	ビス Screw
B78	XBPSF40P08K00	DA	AA		C	ビス Screw
B79	XBPSF40P08000	DA	AA		C	ビス Screw
B80	XBPUZ40P06000	DA	AA		C	ビス Screw
B81	XBPUZ40P12K00	DA	AA		C	ビス Screw
B82	XBPBZ40P10000	DA	AA		C	ビス Screw
B83	XBBSD30P04000	DA	AA		C	ビス Screw
B84	XBPSD40P14000	DA	AA		C	ビス Screw
B85	XBPSF40P10K00	DA	AA		C	ビス Screw
B86	XBPSD23P06000	DA	AA		C	ビス Screw
B87	XBPSD23P12000	DA	AA		C	ビス Screw
B88	XBSSD30P06000	DA	AA		C	ビス Screw
B89	XBPBZ40P06K00	DA	AA		C	ビス Screw
B90	XBPSD30P14K00	DA	AA		C	ビス Screw
C01	XCBSD30P06000	DA	AA		C	ビス Screw
C02	XCBSD30P08000	DA	AA		C	ビス Screw
C03	XCPSD30P06000	DB	AA		C	ビス Screw
C04	XCPSD30P08000	DA	AA		C	ビス Screw
C05	XCPSD30P12000	DA	AA		C	ビス Screw
C06	XCPSD30P18000	DA	AA		C	ビス Screw
C07	XCPSD40P06000	DA	AA		C	ビス Screw
C08	XCPSD40P08000	DA	AA		C	ビス Screw
C09	XCPSD40P10000	DA	AA		C	ビス Screw
C10	XCPSD40P16000	DA	AA		C	ビス Screw
C11	XCPSF30P06000	DA	AA		C	ビス Screw
C12	XCPSF40P08000	DA	AA		C	ビス Screw
C13	XCSSC40P10000	DA	AA		C	ビス Screw
C14	XCSSD30P06000	DA	AA		C	ビス Screw
C15	XCSSD30P10000	DA	AA		C	ビス Screw
C16	XCSSF30P08000	DA	AA		C	ビス Screw
C17	XCTSD40P06000	DA	AA		C	ビス Screw
C18	XCTSF30P08000	DA	AA		C	ビス Screw
C19	XCTSF40P10000	DA	AA		C	ビス Screw
C20	XCBSD30P10000	DA	AA		C	ビス Screw
C21	XUPSD30P06000	DA	AA		C	ビス Screw
E01	XRESP20—04000	DA	AA		C	Eリング E type ring
E02	XRESP30—04000	DA	AA		C	Eリング E type ring
E03	XRESP30—05000	DA	AA		C	Eリング E type ring
E04	XRESP40—05000	DA	AA		C	Eリング E type ring
E05	XRESP40—06000	DA	AA		C	Eリング E type ring
E06	XRESP50—06000	DA	AA		C	Eリング E type ring
E07	XRESP60—08000	DA	AA		C	Eリング E type ring
E08	XRESP70—08000	DA	AA		C	Eリング E type ring
E09	XRESP90—08000	DA	AA		C	Eリング E type ring
E10	XRASP04—10000	DA	AA		C	Cリング C ring
N01	XNEBN30—24000	DA	AC		C	ナット Nut
N02	XNEBN40—32000	DA	AA		C	ナット Nut
N03	XNEBN50—40000	DA	AA		C	ナット Nut
N04	XNESD30—18000	DA	AA		C	ナット Nut
N05	XNESD30—24000	DA	AA		C	ナット Nut
N06	XNESD40—24000	DA	AA		C	ナット Nut
N07	XNESD40—32000	DA	AA		C	ナット Nut
N08	XNESD50—40000	DA	AA		C	ナット Nut
S01	XBSBZ40P08000	DA	AA		C	ビス Screw
S02	XBSBZ40P10000	DA	AA		C	ビス Screw
S03	XBSRZ30P06000	DA	AA		C	ビス Screw
S04	XBSSD30P16000	DA	AA		C	ビス Screw
S05	XBSSD40P06000	DA	AA		C	ビス Screw
S06	XBSSD40P08000	DA	AA		C	ビス Screw
S07	XBSSD40P10000	DA	AA		C	ビス Screw
T01	XBTSC30P06000	DA	AA		C	ビス Screw
T02	XBTSC40P06000	DA	AA		C	ビス Screw
T03	XBTSC40P08000	DA	AA		C	ビス Screw
T04	XBTSD40P06000	DA	AA		C	ビス Screw
T05	XBTSF30P06000	DA	AA		C	ビス Screw
T06	XBTSF40P05000	DA	AA		C	ビス Screw
T07	XBTSF40P06000	DA	AA		C	ビス Screw
T08	XBTSF40P08000	DA	AA		C	ビス Screw
T09	XBTSF40P10000	DA	AA		C	ビス Screw
T10	XBTSF40P14000	DA	AA		C	ビス Screw
T11	XBTSF40P16000	DA	AA		C	ビス Screw
T12	XBTSF50P06000	DA	AA		C	ビス Screw
T13	XBTSC40P10000	DA	AA		C	ビス Screw
W01	XWHBN30—05000	DA	AA		C	ワッシャ Washer
W02	XWHBN40—08100	DA	AA		C	ワッシャ Washer
W03	XWHSD30—05000	DA	AA		C	ワッシャ Washer
W04	XWHSD30—05080	DA	AA		C	ワッシャ Washer
W05	XWHSD30—08100	DA	AA		C	ワッシャ Washer
W06	XWHSD40—08000	DA	AA		C	ワッシャ Washer
W07	XWHSD40—08100	DA	AA		C	ワッシャ Washer
W08	XWHSD40—08120	DA	AA		C	ワッシャ Washer
W09	XWHSD50—08120	DA	AA		C	ワッシャ Washer
W10	XWHSF40—08100	DA	AA		C	ワッシャ Washer
W11	XWSPN30—07000	DA	AA		C	ワッシャ Washer

90 ビス・ナット・ワッシャー(Hardware parts)

NO.	PARTS CODE	PRICE R.		NEW	P/R	DESCRIPTION
		Ja.	Ex.			
W12	XWSSD50—13000	DA	AA		C	ワッシャ Washer
W13	XWUSD30—04065	DA	AA		C	ワッシャ Washer

NO.	PARTS CODE	PRICE R.		NEW	P/R	DESCRIPTION
		Ja.	Ex.			

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PARTS CODE	NO.	PRICE R.		NEW	P/R	
		Ja.	Ex.			
【C】						
CANGF0951FC01	4- 8	EA	AL	N	C	
CANGF0961FC01	19- 47	DS	AG	N	C	
CANGK0955FC31	18- 55	DW	AH	N	C	
CANGK0956FC31	18- 36	DU	AG	N	C	
CANGK0957FC01	7- 1	DQ	AF	N	C	
CANGT0949FC01	2- 3	DM	AF	N	C	
CANGT0950FC01	2- 17	DM	AF	N	C	
CANGT0960FC01	18- 6	EE	AM	N	C	
CBŌXZ0051FC01	11- 28	FS	AW	N	C	
CBŌXZ0051FC51	20- 16	RJ	BV	N	E	
CBŌXZ0052FC01	5- 12	FQ	AW	N	C	
CBŌXZ0052FC51	20- 5	HN	BG	N	E	
CBŌXZ0052FC52	20- 5	HN	BG	N	E	
CBTN—0042FC01	3- 22	DL	AE	N	C	
CCAB—0394FC01	1- 8	FZ	AY	N	D	
CCAB—0394FC02	1- 8		AY	N	D	
CCAB—0394FC03	1- 8		AY	N	D	
CCAB—0395FC01	1- 1	FQ	AW	N	D	
CCAB—0397FC31	1- 2	FB	AS	N	D	
CCASP0047FC51	21- 901	LH	BM	N	E	
CCASP0047FC52	21- 902		DH	N	E	
CCASP0047FC53	21- 903		DH	N	E	
CCASP0047FC54	21- 904		DH	N	E	
CCASP0047FC55	21- 905		DH	N	E	
CCASP0048FC53	21- 906		BG	N	E	
CCASZ0067FC01	22- 1	DH	AD		D	
CCASZ0067FC02	22- 1	DC	AB		D	
CCASZ0079FC01	12- 5	FL	AV	N	E	
CCASZ0079FC51	20- 19	GA	AY	N	E	
CCASZ0080FC52	20- 17	FP	AN	N	E	
CCASZ0081FC01	14- 5	ED	AM	N	E	
CCASZ0081FC02	14- 101		AP	N	E	
CCASZ0081FC51	20- 4	FN	AV	N	E	
CCASZ0081FC52	20- 4		AT	N	E	
CCLR—0164FC01	8- 27	DU	AG	N	C	
CCLR—0165FC01	8- 19	DU	AG	N	C	
CCŌVH0129FC31	2- 16	HF		N	D	
CCŌVH0129FC32	2- 16		BF	N	D	
CCŌVH0129FC34	2- 16		BF	N	D	
CCŌVP0391FC01	11- 30	ES	AQ	N	C	
CCŌVQ0396FC01	19- 40	FT	AW	N	C	
CCŌVQ0396FC02	19- 40	FT	AW	N	C	
CCŌVQ0396FC03	19- 40	FT	AW	N	C	
CDRM—0011FC51	6- 29	MY	BR	N	B	
CFIX—0125FC01	10- 9	DW	AH	N	D	
CFIX—0126FC01	4- 16	EA	AK	N	C	
CFLT—0024FC31	17- 15	FR	AW	N	B	
〃	19- 23	FR	AW	N	B	
CFLT—0026FC01	19- 49	FK	AU	N	B	
CFRM—0204FC01	6- 48	FR	AW	N	C	
〃	20- 3	FR	AW	N	C	
CFRM—0205FC01	6- 19	FS	AW	N	C	
CFRM—0206FC01	18- 89	GK	BA	N	C	
CFRM—0207FC31	8- 901	LJ	BM	N	C	
CFRM—0210FC01	19- 16	ED	AM	N	C	
CFS—T0058FC52	17- 3	EA	AK	N	A	
CFS—T0062FC31	4- 12	DX	AH	N	A	
CFS—T0062FC32	4- 12		AK	N	A	
CFTA—0022FC01	21- 1	FS	AW	N	D	
CFTA—0022FC02	21- 1	FS	AW	N	D	
CFTA—0022FC03	21- 1	FP	AW	N	D	
CFTA—0022FC04	21- 1	FS	AW	N	D	
CFTA—0022FC05	21- 1	FP	AW	N	D	
CFTA—0023FC02	21- 1	FL	AU	N	D	
CGERH0157FC01	6- 27	DT	AG	N	C	
CGERH0159FC01	8- 25	EC	AL	N	C	
CGERH0160FC01	8- 31	EK	AN	N	C	
CGIDH0451FC01	2- 20	ED	AM	N	C	
CGIDH0451FC02	2- 20	EC	AL	N	C	
CGIDH0452FC01	2- 18	EB	AL	N	C	
CGIDH0452FC02	2- 18	EB	AL	N	C	
CGIDH0452FC03	2- 18	DZ	AK	N	C	
CGIDH0454FC01	6- 7	EU	AQ	N	C	
CGIDH0457FC01	19- 41	FL	AV	N	C	
CGIDH0458FC01	9- 2		AT	N	C	
CGIDM0464FC51	7- 7	EB	AL	N	C	
CGIDM0464FC52	7- 7		AG	N	C	
CHLDZ0439FC01	2- 6	FJ	AU	N	C	
CLEVF0248FC01	6- 57	DQ	AF	N	C	

PARTS CODE	NO.	PRICE R.		NEW	P/R	
		Ja.	Ex.			
CLEVP0249FC01	19- 46	EH	AN	N	C	
CLEVP0249FC02	19- 25	EK	AN	N	C	
CLEVP0251FC01	10- 12	DH	AE	N	C	
CPAKA0902FC01	22- 2	FQ	AW	N	D	
CPLTM1036FC01	18- 29	DP	AF	N	C	
CPLTM1037FC01	18- 16	DL	AE	N	C	
CPLTM1038FC01	2- 4	EN	AP	N	C	
CPLTM1045FC01	11- 19	DZ	AK	N	C	
CPLTM1060FC01	8- 29	EA	AK	N	D	
CPLTM1063FC01	21- 15	FD	AS	N	C	
CPLTM1065FC01	21- 15	FA	AS	N	C	
CPLTM1066FC01	21- 15		AS	N	C	
CPLTM1075FC01	21- 5	EB	AL	N	C	
CPLTM1092FC01	21- 11	EN	AP	N	C	
CPNLC0117FC01	3- 12	FR	AW	N	D	
CPNLC0117FC51	3- 901	NC	BS	N	E	
CPNLC0117FC52	3- 901	NC	BS	N	E	
CPNLC0117FC53	3- 901	NC	BS	N	E	
CPWBE0278FC51	3- 21	HV	BK	N	E	
〃	24- 901	HV	BK	N	E	
CPWBE0279FC51	3- 27	EA	AK	N	E	
〃	25- 901	EA	AK	N	E	
CPWBF0276FC51	20- 11	HJ	BG	N	E	
〃	27- 901	HJ	BG	N	E	
CPWBF0276FC52	20- 11	HJ	BG	N	E	
〃	27- 901	HJ	BG	N	E	
CPWBF0276FC53	20- 11	HJ	BG	N	E	
〃	27- 901	HJ	BG	N	E	
CPWBF0276FC54	20- 11	HJ	BG	N	E	
〃	27- 901	HJ	BG	N	E	
CPWBF0276FC55	20- 11	HJ	BG	N	E	
〃	27- 901	HJ	BG	N	E	
CPWBF0276FC56	20- 11	HJ	BG	N	E	
〃	27- 901	HJ	BG	N	E	
CPWBF0276FC57	20- 11	HJ	BG	N	E	
〃	27- 901	HJ	BG	N	E	
CPWBF0277FC51	28- 901	HV	BK	N	E	
CPWBF0277FC52	28- 901	HV	BK	N	E	
CPWBF0280FC51	20- 10	FW	AX	N	E	
〃	30- 901	FW	AX	N	E	
CPWBF0280FC52	20- 10	FW	AX	N	E	
〃	30- 901	FW	AX	N	E	
CPWBF0281FC51	6- 44	FC	AS	N	E	
〃	16- 4	FC	AS	N	E	
〃	26- 901	FC	AS	N	E	
CPWBF0283FC51	18- 83	FJ	AT	N	E	
〃	29- 901	FJ	AT	N	E	
CPWBF0283FC52	29- 901	FJ	AT		E	
CPWBF0283FC53	29- 901	FJ	AT		E	
CPWBF0285FC51	29- 901	FT	AW		E	
CPWBF0285FC52	29- 901	FT	AW		E	
CPWBN0284FC51	6- 6	TB	BW	N	E	
〃	23- 901	TB	BW	N	E	
CR—WZ0181FC02	6- 65	ET	AQ	N	B	
CR—WZ0182FC01	6- 65	ET	AQ	N	B	
CR—WZ0183FC01	6- 65	ET	AQ	N	B	
CR—WZ0184FC01	6- 65	ET	AQ	N	B	
CR—WZ0185FC01	6- 65	ET	AQ	N	B	
CR—WZ0186FC01	6- 65	ET	AQ	N	B	
CR—WZ0199FC01	6- 65	ET	AQ	N	B	
CREFL0054FC02	15- 9	FJ	AU	N	C	
CREFL0054FC03	15- 101		AU	N	C	
CREFL0054FC52	20- 2	HC	BE	N	C	
CREFL0054FC53	20- 2		BB	N	C	
CREFL0056FC31	20- 20	TX	BZ	N	C	
CREFL0056FC32	20- 20	TW	BZ	N	C	
CREFL0056FC33	20- 20	TW	BZ	N	C	
CREFL0056FC34	20- 20	TX	BZ	N	C	
CRŌLM0294FC01	18- 39	FV	AX	N	C	
CRŌLM0295FC01	18- 45	FR	AW	N	C	
CSFTZ0461FC01	6- 24	FL	AV	N	C	
CTME—0085FC01	21- 16	DQ	AF	N	D	
CTPE—0049FC01	7- 2	EF	AM	N	C	
CTPE—0055FC01	7- 2	EC	AL	N	C	
【D】						
DHAI—0304FCZZ	31- 1	FP	AV		D	
DWIR—0158CSZZ	12- 4	HM	BH		A	
〃	13- 4	HM	BH		A	
〃	14- 4	HM	BH		A	

PARTS CODE	NO.	PRICE R.		NEW	P/R	
		Ja.	Ex.			
【G】						
GCAB—0396FCZZ	1- 3	ER	AQ	N	D	
GCAB—0398FCZZ	1- 4	ER	AQ	N	D	
GCAB—0399FCZZ	1- 7	ES	AQ	N	D	
GCAB—0401FCZZ	1- 4	ER	AQ	N	D	
GCAB—0402FCZZ	1- 4	ER	AQ	N	D	
GCASP0047FCZZ	21- 8	FQ	AW	N	D	
GCASP0048FCZZ	21- 8	FP	AW	N	D	
GCŌVZ0112FCZZ	22- 3	EW	AR		D	
GLEGP0010FCZZ	18- 60	DC	AB	N	C	
GLEGP0010UCZZ	18- 37	DB	AB		C	
【H】						
HBDGD0028FCZZ	1- 6	DF	AD	N	D	
HINDP0119FCZZ	3- 31	FE	AS	N	D	
HINDP0120FCZZ	21- 7	DL	AE	N	D	
HINDP0121FCZZ	21- 7		AF	N	D	
HINDP0122FCZZ	21- 7	DL	AE	N	D	
HINDP0123FCZZ	21- 7	DU	AG	N	D	
【J】						
JBTN—0043FCZZ	3- 25	EC	AL	N	C	
JHNDP0037FCZZ	6- 46	DL	AE		C	
JKNBP0064FCZZ	3- 2	DT	AG	N	C	
JKNBZ0052FCZZ	19- 39	DB	AB		C	
【L】						
LANGF0952FCZZ	4- 5	DX	AH	N	C	
LANGT0736FCZZ	3- 6	DB	AB	N	C	
LANGT0753FCZZ	21- 17	DB	AB	N	C	
LANGT0948FCZZ	16- 5	DC	AB	N	C	
〃	26- 1	DC	AB	N	C	
LANGT0953FCZZ	18- 59	DG	AD	N	C	
LANGT0954FCZZ	6- 68	DU	AH	N	C	
LANGT0958FCZZ	20- 7	DG	AD	N	C	
LANGT0959FCZZ	3- 29	DK	AE	N	C	
LANGT0962FCZZ	6- 35	DF	AD	N	C	
LANGT0966FCZZ	3- 20	DD	AC	N	C	
LBNDJ0020FCZZ	11- 41	DB	AA		C	
LBŌSZ0383FCZZ	18- 13	DS	AH	N	C	
LBŌSZ0409FCZZ	6- 64	DQ	AF		A	
LBŌSZ0545FCZZ	6- 69	DQ	AF	N	C	
LBŌSZ0550FCZZ	20- 13	DW	AH	N	C	
LBŌSZ0556FCZZ	6- 76	DU	AH	N	C	
LBSHC0002FCZZ	18- 80	DB	AC		C	
LBSHC0110FCZZ	18- 57	DC	AB	N	C	
LBSHC0140FCZZ	6- 49	DA	AA	N	C	
LBSHC0141FCZZ	6- 18	DB	AB	N	C	
LBSHZ0087FCZZ	21- 4	DH	AD		C	
LBSHZ0101FCZZ	19- 20	FB	AS		C	
LDAIU0120FCZZ	4- 1	DD	AC	N	C	
LFIX—0016FCZZ	18- 73	DH	AD		C	
LFIX—0084FCZZ	18- 73	DD	AC		C	
LFIX—0123FCZZ	4- 9	AK	AE	N	D	
LFRM—0202FCZZ	4- 14	DS	AG	N	C	
LFRM—0203FCZZ	4- 3	DV	AH	N	C	
LFRM—0209FCZZ	19- 38	DZ	AK	N	C	
LHLDW0135FCZZ	9- 3	DA	AA		C	
LHLDW0322FCZZ	17- 14	DB	AB		C	
LHLDZ0272FCZZ	18- 35	DQ	AF		C	
LHLDZ0410FCZZ	15- 16	DG	AD	N	C	
LHLDZ0411FCZZ	15- 3	DF	AD	N	C	
LHLDZ0425FCZZ	12- 3	DK	AE	N	C	
LHLDZ0439FCZZ	2- 6		AQ	N	C	
LHLDZ0440FCZZ	18- 79	EC	AL	N	C	
LHLDZ0441FCZZ	19- 45	DX	AH	N	C	
LHLDZ0442FCZZ	19- 24	DV	AH	N	C	
LHLDZ0445FCZZ	14- 11	DH	AE	N	C	
LHLDZ0446FCZZ	14- 3	DJ	AE	N	C	
LHLDZ0484FCZZ	13- 11	DH	AD	N	C	
LHLDZ0485FCZZ	13- 3	DJ	AE	N	C	
LHLDZ0487FCZZ	12- 9	DQ	AF	N	C	
LPINS0024FCZZ	5- 15	DB	AB		C	
〃	6- 45	DB	AB		C	
〃	11- 8	DB	AB		C	
〃	18- 23	DB	AB		C	
〃	19- 6	DB	AB		C	
LPINS0052FCZZ	15- 5	DB	AB	N	C	
LPINS0078FCZZ	8- 41	DA	AA	N	C	
LPLTM0711FCZZ	10- 14	DD	AC		C	
LPLTM0721FCZZ	17- 9	DH	AD		C	
LPLTM1039FCZZ	2- 10	DB	AB	N	C	
LPLTM1040FCZZ	10- 13	DJ	AE	N	C	

PARTS CODE	NO.	PRICE R.		NEW	P/R	
		Ja.	Ex.			
LPLTM1041FCZZ	1- 5	DA	AA	N	C	
LPLTM1043FCZZ	11- 27	DD	AC	N	C	
LPLTM1044FCZZ	11- 39	DD	AC	N	C	
LPLTM1046FCZZ	11- 36	DF	AD	N	C	
LPLTM1047FCZZ	11- 29	DD	AC	N	C	
LPLTM1054FCZZ	5- 20	DE	AC	N	C	
LPLTM1055FCZZ	4- 4	DP	AF	N	C	
LPLTM1056FCZZ	6- 43	FS	AW	N	C	
LPLTM1058FCZZ	11- 38	DD	AC	N	C	
LPLTM1059FCZZ	20- 15	DZ	AK	N	C	
LPLTM1061FCZZ	8- 3	DB	AB	N	C	
LPLTM1062FCZZ	8- 14	DB	AB	N	C	
LPLTM1067FCZZ	17- 17	EA	AK	N	C	
LPLTM1068FCZZ	17- 8	DX	AH	N	C	
LPLTM1074FCZZ	21- 18	DE	AC	N	C	
LPLTM1079FCZZ	8- 15	DE	AC	N	C	
LPLTM1080FCZZ	8- 37	DC	AB	N	C	
LPLTM1081FCZZ	2- 9	DY	AK	N	C	
LPLTM1084FCZZ	3- 10	DA	AA	N	C	
LPLTM1088FCZZ	6- 22	DG	AD	N	C	
LPLTM1089FCZZ	6- 33	DU	AG	N	C	
LPLTM1090FCZZ	6- 41	DF	AD	N	C	
LPLTM1091FCZZ	5- 28	DN	AF	N	C	
LPLTM1093FCZZ	8- 45	DC	AB	N	C	
LPLTM1094FCZZ	5- 4	DK	AE	N	C	
LPLTM1095FCZZ	5- 3	DS	AG	N	C	
LPLTM1214FCZZ	6- 84	DE	AC	N	C	
LSŌU—0043FCZZ	22- 4	EU	AQ	N	D	
LSTPF0078FCZZ	2- 25		AB	N	C	
LSTPP0087FCZZ	21- 6	DD	AC		C	
LSTPP0096FCZZ	2- 8	DB	AB	N	C	
LSTPP0097FCZZ	18- 7	DC	AC	N	C	
LSTYM0047FCZZ	6- 32	DY	AH		C	
LSUPP0002FCZZ	6- 11	DD	AC		C	
〃	28- 1	DD	AC		C	
LSUPP0007FCZZ	6- 20	DL	AE		C	
LSUPP0026FCZZ	20- 9	DB	AB	N	C	
LX—BZ0049FCZZ	18- 91	DB	AB		C	
LX—BZ0073FCZZ	4- 22	DA	AA		C	
LX—BZ0102FCZZ	4- 25	DA	AA		C	
LX—BZ0113FCZZ	13- 9	DH	AE		C	
LX—BZ0178FCZZ	4- 24	DA	AA	N	C	
LX—BZ0179FCZZ	11- 45	DV	AH	N	C	
LX—BZ0180FCZZ	19- 48	DA	AA	N	C	
LX—BZ0181FCZZ	4- 23	DA	AA	N	C	
LX—BZ0183FCZZ	2- 23	DA	AA	N	C	
LX—BZ0184FCZZ	19- 21	DB	AB	N	C	
LX—BZ0187FCZZ	11- 35	DA	AA	N	C	
LX—BZ0190FCZZ	11- 48	DA	AA	N	C	
LX—BZ0191FCZZ	18- 72	DA	AA	N	C	
LX—BZ0192FCZZ	18- 97	DA	AA		C	
LX—BZ0194FCZZ	8- 1	DB	AB	N	C	
LX—BZ0203FCZZ	2- 22	DA	AA		C	
LX—BZ0204FCZZ	18- 90	DA	AA		C	
LX—NZ0025FCZZ	6- 70	DA	AA	N	C	
LX—NZ0026FCZZ	6- 78	DA	AA	N	C	
〃	20- 23	DA	AA	N	C	
LX—NZ0032FCZZ	6- 13	DB	AA		C	
〃	23- 1	DB	AA		C	
LX—NZ0035FCZZ	17- 4	DA	AA		C	
LX—WZ0017FCZZ	6- 26	DA	AA		C	
〃	18- 9	DA	AA		C	
LX—WZ0064FCZZ	5- 10	DA	AA		C	
〃	21- 2	DA	AA		C	
LX—WZ0067FCZZ	10- 7	DA	AA		C	
LX—WZ0077FCZZ	18- 21	DB	AA		C	
LX—WZ0111FCZZ	6- 77	DB	AB	N	C	
〃	20- 22	DB	AB	N	C	
LX—WZ0112FCZZ	20- 14	DA	AA	N	C	
LX—WZ0113FCZZ	6- 12	DB	AB	N	C	
LX—WZ0116FCZZ	19- 50	DB	AB	N	C	
LX—WZ0117FCZZ	11- 46	DB	AB	N	C	
【M】						
MARMP0031FCZZ	18- 50	DK	AE	N	C	
MCAMP0031FCZZ	10- 4	DB	AB		C	
MLEVF0207FCZZ	18- 61	DH	AD		C	
MLEVF0250FCZZ	19- 19	DK	AE	N	C	
MLEVP0195FCZZ	10- 10	DB	AB		C	
MLEVP0197FCZZ	10- 2	DH	AD		C	
MLEVP0199FCZZ	6- 38	DH	AD		C	

PARTS CODE	NO.	PRICE R.		NEW	P/R
		Ja.	Ex.		
MLEVP0205FCZZ	1- 9	DH	AD		C
MLEVP0206FCZZ	10- 6	DB	AB		C
MLEVP0247FCZZ	6- 60	DC	AC	N	C
MSLIF0027FCZZ	2- 5	FX	AX	N	C
MSLIF0029FCZZ	2- 5	FV	AX	N	C
MSPRC0541FCZZ	18- 12	DR	AF		B
MSPRC0621FCZZ	6- 63	DF	AD	N	A
MSPRC0640FCZZ	6- 59	DB	AB	N	B
MSPRC0644FCZZ	8- 11	DA	AA	N	B
MSPRC0645FCZZ	18- 52	DC	AB	N	B
MSPRC0648FCZZ	19- 18	DE	AC	N	B
MSPRC0649FCZZ	19- 11	DC	AB	N	B
MSPRC0652FCZZ	6- 3	EW	AR	N	B
〃	20- 18	EW	AR	N	B
MSPRC0698FCZZ	19- 36	DB	AB	N	B
MSPRD0642FCZZ	8- 21	DJ	AE	N	B
MSPRK0501FCZZ	15- 4	DA	AA	N	B
MSPRP0475FCZZ	4- 18	DD	AC	N	B
MSPRP0480FCZZ	5- 9	DE	AC		B
MSPRP0643FCZZ	8- 4	DB	AB	N	B
MSPRP0655FCZZ	9- 5	DA	AA	N	B
MSPRT0140FCZZ	2- 14	DB	AA		B
MSPRT0458FCZZ	10- 8	DD	AC		B
MSPRT0459FCZZ	10- 11	DD	AC		B
MSPRT0505FCZZ	10- 3	DD	AC		B
MSPRT0513FCZZ	12- 8	DB	AA		B
〃	13- 10	DB	AA		B
〃	14- 10	DB	AA		B
MSPRT0571FCZZ	6- 58	DB	AB	N	B
MSPRT0636FCZZ	5- 21	DE	AC	N	B
MSPRT0639FCZZ	7- 3	DA	AA	N	B
MSPRT0646FCZZ	18- 43	DB	AB	N	B
MSPRT0656FCZZ	8- 30	DB	AB	N	B
MSPRT0660FCZZ	18- 32	DC	AB	N	B
MSPRT0696FCZZ	18- 18	DD	AC	N	B
【N】					
NBLTV0013FCZZ	18- 20	ES	AQ		B
NBRGC0100FCZZ	19- 12	DD	AC		B
NBRGC0124FCZZ	10- 5	DB	AB		B
NBRGC0133FCZZ	6- 16	DD	AC		B
〃	18- 31	DD	AC		B
NBRGC0136FCZZ	8- 17	DD	AC		B
〃	11- 12	DD	AC		B
NBRGC0140FCZZ	5- 16	DH	AD		B
〃	11- 14	DH	AD		B
NBRGC0167FCZZ	18- 14	DC	AB	N	B
〃	19- 10	DC	AB	N	B
NBRGC2019SCZZ	18- 24	DH	AC		B
NBRGF0164FCZZ	19- 7	DC	AB	N	B
NBRGP0146FCZZ	19- 15	FG	AT		B
NBRGP0170FCZZ	18- 44	DC	AB	N	B
NBRGY0142FCZZ	19- 9	ES	AQ		B
NBRGY0169FCZZ	8- 10	EA	AK	N	B
NGERH0036FCZZ	18- 30	DD	AC		C
〃	19- 3	DD	AC		C
NGERH0049FCZZ	5- 14	DH	AD		C
NGERH0099FCZZ	18- 27	DD	AC		C
〃	19- 5	DD	AC		C
NGERH0109FCZZ	10- 1	FV	AX		C
NGERH0111FCZZ	11- 4	DH	AD		C
〃	18- 26	DH	AD		C
NGERH0114FCZZ	19- 4	DY	AK		C
NGERH0115FCZZ	19- 2	DH	AE		C
NGERH0117FCZZ	5- 7	DD	AC		C
NGERH0118FCZZ	5- 18	DD	AC		C
NGERH0121FCZZ	6- 17	DS	AG		C
NGERH0156FCZZ	11- 9	DD	AC	N	C
NGERH0158FCZZ	11- 7	DE	AC	N	C
NGERH0161FCZZ	8- 13	DD	AC	N	C
NGERH0162FCZZ	8- 35	DD	AC	N	C
NGERH0163FCZZ	8- 23	DE	AC	N	C
NGERH0164FCZZ	8- 32	DF	AD	N	C
NGERH0165FCZZ	8- 2	DS	AG	N	C
NPLYZ0062FCZZ	18- 10	DU	AG	N	C
NPLYZ0064FCZZ	8- 42	DG	AD	N	C
NPLYZ0065FCZZ	8- 44	DD	AC	N	C
NPLYZ0066FCZZ	18- 25	DF	AD	N	C
NRŌLI0232FCZZ	19- 26	LV	BQ		C
NRŌLM0292FCZZ	18- 15	FL	AV	N	C
NRŌLM0293FCZZ	18- 92	DH	AD		

PARTS CODE	NO.	PRICE R.		NEW	P/R
		Ja.	Ex.		
NRŌLM0297FCZZ	11- 20	HA	BE	N	C
NRŌLP0234FCZZ	9- 6	DH	AC		C
NRŌLP0288FCZZ	11- 17	FA	AR	N	C
NRŌLR0296FCZZ	19- 32	EU	AQ	N	C
NRŌLR0316FCZZ	18- 48	FU	AX	N	C
NRŌLT0231FCZZ	19- 30	LK	BP		C
NSFTZ0348FCZZ	21- 20	DD	AC		C
NSFTZ0458FCZZ	18- 47	DN	AF	N	C
NSFTZ0462FCZZ	11- 10	DH	AD	N	C
NSFTZ0463FCZZ	5- 25	EG	AM	N	C
NSFTZ0464FCZZ	5- 22	EB	AL	N	C
NSFTZ0469FCZZ	8- 8	DW	AH	N	C
NSFTZ0470FCZZ	8- 12	DW	AH	N	C
NSFTZ0471FCZZ	8- 38	DH	AD		C
NSFTZ0472FCZZ	18- 49	DE	AC	N	C
NSFTZ0475FCZZ	19- 29	DZ	AK	N	C
NSFTZ0480FCZZ	2- 2	DF	AD	N	C
NSFTZ0485FCZZ	2- 7	DS	AG	N	C
NSFTZ0487FCZZ	2- 12	DK	AE	N	C
NSFTZ0514FCZZ	19- 33	DQ	AF	N	C
【P】					
PBARM0028FCZZ	6- 55	EG	AN		E
PBRKS0033FCZZ	8- 48	DC	AB	N	B
PBRSR0012FCZZ	22- 5	DL	AE		D
PBRSS0027FCZZ	6- 56	EC	AL	N	B
PCASZ0080FCZZ	13- 5	FB	AS	N	C
PCLC—0069FCZZ	18- 22	GC	AZ	N	B
PCLR—0123FCZZ	18- 17	DD	AC		C
PCLR—0163FCZZ	11- 16	DD	AC	N	C
PCŌVF0436FCZZ	13- 6	DB	AB	N	C
PCŌVP0281FCZZ	13- 1	DA	AA		C
PCŌVP0285FCZZ	14- 1	DA	AA	N	C
PCŌVP0298FCZZ	12- 1	DA	AA	N	C
PCŌVP0373FCZZ	15- 12	DE	AC	N	C
PCŌVP0374FCZZ	15- 1	DE	AC	N	C
PCŌVP0392FCZZ	11- 43	DF	AD	N	C
PCŌVP0394FCZZ	2- 1	DY	AK	N	C
PCŌVP0395FCZZ	3- 3	DF	AD	N	C
PCŌVP0401FCZZ	18- 38	DU	AH	N	C
PCŌVP0437FCZZ	12- 7	DB	AB	N	C
PCŌVP0438FCZZ	14- 9	DB	AB	N	C
PCŌVW0399FCZZ	6- 5	DF	AD	N	C
〃	23- 2	DF	AD	N	C
PCUSF0091FCZZ	18- 86	DA	AA	N	C
PCUSF0105FCZZ	2- 24	DB	AB	N	C
PFILW0030FCZZ	4- 19	DK	AE		C
PFILW0033FCZZ	15- 13	FG	AT	N	C
PFILZ0037FCZZ	6- 80		AT	N	C
PFLT—0019FCZZ	15- 7	DJ	AE	N	C
PGIDH0453FCZZ	7- 5	DF	AD		C
PGIDH0455FCZZ	18- 46	EX	AR	N	C
PGIDH0458FCZZ	9- 2	EN	AP	N	C
PGIDH0459FCZZ	18- 51	DJ	AE	N	C
PGIDH0460FCZZ	18- 28	DJ	AE	N	C
PGIDH0462FCZZ	6- 53	DM	AF	N	C
PGIDH0465FCZZ	6- 30	DU	AG	N	C
PGIDH0466FCZZ	21- 3	EJ	AN	N	C
PGIDH0467FCZZ	8- 43	DB	AB	N	C
PGIDH0479FCZZ	7- 5	EF	AM	N	
PGISC0023FCZZ	4- 21	DB	AB		C
PGIST0024FCZZ	4- 17	DL	AE	N	C
PGLSP0032FCZZ	2- 11	GK	BB	N	D
PGUMS0092FCZZ	18- 8	DA	AA	N	C
PHED—0009FCZZ	6- 21	GC	AZ	N	B
PHED—0010FCZZ	6- 21	GC	AZ	N	B
PHŌG—0007FCZZ	18- 5	DA	AA		C
PHŌG—0020FCZZ	3- 9	DA	AA		C
PHŌG—0081FCZZ	29- 1	DB	AB		C
PHŌG—0084FCZZ	29- 1	DB	AB		C
PHŌG—0114FCZZ	17- 5	DB	AB		C
PHŌG—0125FCZZ	3- 18	DB	AB		C
PHŌG—0126FCZZ	3- 17	DB	AB		C
PHŌG—0137FCZZ	3- 30	DB	AB		C
PHŌG—0139FCZZ	18- 1	DB	AB		C
PHŌG—0166FCZZ	18- 63	DB	AB	N	C
PHŌG—0168FCZZ	17- 1	DC	AB	N	C
〃	19- 14	DC	AB	N	C
PLNS—0016FCZZ	4- 6	RH	BU	N	C
PMAGT0015FCZZ	3- 4	DH	AD	N	C
PMLT—0293FCZZ	5- 30	DB	AB	N	C

PARTS CODE	NO.	PRICE R.		NEW	P/R	
		Ja.	Ex.			
PMLT—0294FCZZ	5- 29	DB	AB	N	C	
PMLT—0295FCZZ	5- 19	DB	AB	N	C	
PMLT—0296FCZZ	5- 27	DC	AC	N	C	
PMLT—0301FCZZ	3- 13	DA	AA	N	C	
PMLT—0302FCZZ	11- 25	DA	AA	N	C	
PMLT—0303FCZZ	4- 13	DA	AA	N	C	
PMLT—0304FCZZ	5- 24	DA	AA	N	C	
PMLT—0305FCZZ	5- 23	DB	AB	N	C	
PMLT—0306FCZZ	11- 24	DA	AA	N	C	
PMLT—0307FCZZ	11- 18	DA	AA	N	C	
PMLT—0308FCZZ	11- 5	DA	AA	N	C	
PMLT—0309FCZZ	5- 2	DA	AA	N	C	
PMLT—0310FCZZ	5- 11	DA	AA	N	C	
PMLT—0311FCZZ	5- 26	DA	AA	N	C	
PMLT—0312FCZZ	5- 13	DB	AB	N	C	
PMLT—0313FCZZ	6- 71	DB	AB	N	C	
PMLT—0314FCZZ	6- 72	DA	AA	N	C	
PMLT—0315FCZZ	6- 73	DA	AA	N	C	
PMLT—0316FCZZ	6- 31	DA	AA	N	C	
PMLT—0317FCZZ	9- 10	DD	AC	N	C	
PMLT—0318FCZZ	14- 6	DK	AE		C	
PMLT—0319FCZZ	11- 21	DA	AA	N	C	
PMLT—0320FCZZ	11- 1	DA	AA	N	C	
PMLT—0321FCZZ	6- 66	DA	AA	N	C	
PMLT—0323FCZZ	5- 32	DE	AC	N	C	
PMLT—0324FCZZ	5- 33	DE	AC	N	C	
PMLT—0334FCZZ	14- 102		AE	N	C	
PMLT—0335FCZZ	11- 51	DA	AA	N	C	
PPIPP0045FCZZ	18- 11	DH	AE		C	
PPIPP0055FCZZ	5- 31	DJ	AE	N	C	
PPIPP0056FCZZ	8- 26	DD	AC	N	C	
PRDAR0021FCZZ	6- 2	DW	AH	N	C	
〃	28- 2	DW	AH	N	C	
PRDAR0022FCZZ	20- 12	DF	AD	N	C	
〃	27- 1	DF	AD	N	C	
PREFL0056FCZZ	4- 7	FH	AT	N	B	
PRNGP0005FCZZ	19- 1	DB	AB		C	
PRNGP0013FCZZ	11- 11	DY	AK		C	
PRNGP0015FCZZ	11- 15	DY	AK		C	
PRNGP0023FCZZ	6- 28	DA	AA	N	C	
〃	18- 58	DA	AA	N	C	
PRNGP0024FCZZ	8- 24	DC	AC	N	C	
PRNGP0025FCZZ	5- 17	DA	AA	N	C	
PSEL—0035FCZZ	11- 49	DA	AA	N	B	
PSEL—0036FCZZ	11- 50	DC	AB	N	B	
PSHEG0315FCZZ	6- 1	DB	AB		C	
〃	28- 3	DB	AB		C	
PSHEG0316FCZZ	6- 9	DB	AB		C	
〃	27- 2	DB	AB		C	
〃	28- 4	DB	AB		C	
PSHEM0593FCZZ	3- 11	DJ	AE	N	C	
PSHEP0598FCZZ	6- 4	DS	AG	N	C	
PSHEP0599FCZZ	3- 28	DD	AC	N	C	
PSHEP0601FCZZ	18- 74	DB	AB	N	C	
PSHEP0612FCZZ	4- 20	DJ	AE	N	C	
PSHEP0613FCZZ	3- 15	DD	AC	N	C	
PSHEP0614FCZZ	6- 52	DF	AD	N	C	
PSHEP0615FCZZ	6- 37	DH	AD	N	C	
PSHEP0616FCZZ	4- 11	DB	AB	N	C	
PSHEP0617FCZZ	6- 23	DF	AD	N	C	
PSHEP0620FCZZ	18- 41	DD	AC	N	C	
PSHEP0621FCZZ	5- 8	DF	AD	N	C	
PSHEP0622FCZZ	18- 42	DA	AA	N	C	
PSHEP0625FCZZ	21- 14	DB	AB	N	C	
PSHEP0626FCZZ	21- 13	DB	AB	N	C	
PSHEP0627FCZZ	21- 23	DF	AD	N	C	
PSHEP0629FCZZ	11- 42	DC	AB	N	C	
PSHEP0630FCZZ	11- 31	DC	AB	N	C	
PSHEP0631FCZZ	5- 5	DF	AD	N	C	
PSHEP0632FCZZ	6- 36	DJ	AE	N	C	
PSHEP0634FCZZ	6- 74	DA	AA	N	C	
PSHEP0642FCZZ	11- 40	DE	AC	N	C	
PSHEP0643FCZZ	11- 3	DB	AB	N	C	
PSHEP0644FCZZ	4- 26	DD	AC	N	C	
PSHEP0645FCZZ	6- 75	DA	AA	N	C	
PSHEP0646FCZZ	9- 9	DM	AF	N	C	
PSHEP0647FCZZ	18- 93	DG	AD	N	C	
PSHEP0648FCZZ	15- 18	DA	AA	N	C	
PSHEP0649FCZZ	15- 17	DA	AA	N	C	
PSHEP0653FCZZ	6- 39	DA	AA	N	C	

PARTS CODE	NO.	PRICE R.		NEW	P/R	
		Ja.	Ex.			
PSHEP0654FCZZ	6- 67	DA	AA	N	C	
PSHEP0656FCZZ	21- 22	DB	AB	N	C	
PSHEP0657FCZZ	6- 83	DE	AC	N	C	
PSHEP0678FCZZ	6- 81	DB	AB	N	C	
PSHEP0679FCZZ	9- 11	DL	AE	N	C	
PSHEP0680FCZZ	6- 82	DB	AB	N	C	
〃	9- 12	DB	AB	N	C	
PSHEP0689FCZZ	11- 22	DE	AC	N	C	
PSHEP0692FCZZ	9- 13	DK	AE	N	C	
PSHEP0693FCZZ	9- 14	DK	AE	N	C	
PSHEP0694FCZZ	5- 1	DJ	AE	N	C	
PSHEP0695FCZZ	5- 34	DE	AC	N	C	
PSHEP0710FCZZ	11- 52	DA	AA	N	C	
PSHEP0713FCZZ	18- 95	DE	AC	N	C	
PSHEP0714FCZZ	18- 94	DC	AC	N	C	
PSHEZ0336FCZZ	18- 70	DH	AD		C	
PSHEZ0538FCZZ	21- 21	DL	AE	N	C	
PSHEZ0564FCZZ	2- 21	FQ	AW		C	
PSHEZ0587FCZZ	2- 19	DY	AK	N	C	
PSHEZ0591FCZZ	11- 2	DA	AA	N	C	
PSHEZ0595FCZZ	18- 84	DD	AC	N	C	
〃	29- 2	DD	AC	N	C	
PSHEZ0596FCZZ	29- 2	DP	AF	N	C	
PSHEZ0603FCZZ	22- 6	DE	AC	N	D	
PSHEZ0650FCZZ	9- 8	DC	AB	N	C	
PSHEZ0671FCZZ	21- 19	DA	AA		C	
PSHEZ0677FCZZ	14- 13	DA	AA	N	C	
PSHEZ0688FCZZ	11- 23	DK	AE	N	C	
PSPAF0005FCZZ	6- 47	DB	AA		C	
PSPAZ0151FCZZ	19- 8	DQ	AG		C	
PSPAZ0177FCZZ	2- 13	DB	AB	N	C	
PSPAZ0178FCZZ	11- 26	DF	AD	N	C	
PSPAZ0179FCZZ	11- 6	DE	AC	N	C	
PSPAZ1043CCZZ	6- 8	DB	AB		C	
〃	28- 5	DB	AB		C	
PSRA—0003FCZZ	19- 27	EX	AR	N	C	
PTME—0072FCZZ	6- 61	DQ	AF	N	C	
PTME—0073FCZZ	6- 51	DQ	AF	N	C	
PTME—0079FCZZ	19- 35	DY	AK		C	
PTME—0081FCZZ	18- 33	DC	AB	N	C	
PTPE—0023FCZZ	17- 11	GV	BD		C	
PTPE—0046FCZZ	11- 32	DA	AA	N	C	
PTPE—0050FCZZ	7- 4	DA	AA	N	C	
PTPE—0056FCZZ	7- 4	DA	AA	N	C	
PTPE—0059FCZZ	6- 79	DH	AE	N	C	
PTUBP0010FCZZ	3- 8	DA	AA		C	
〃	15- 8	DA	AA		C	
PTUBP0054FCZZ	15- 11	DA	AA	N	C	
PTUBP0061FCZZ	18- 64	DA	AA	N	C	
PWIR—0076FCZZ	19- 42	DM	AE	N	C	
PWIR—0077FCZZ	2- 15	EC	AL	N	C	
〃	8- 46	EC	AL	N	C	
PWIR—0078FCZZ	21- 12	DP	AF	N	C	
PWIR—0079FCZZ	11- 47	DB	AB	N	C	
PZETZ0037FCZZ	18- 40	DC	AC	N	C	
【Q】						
QACCJ3412QCZZ	18- 88	EG	AN		B	
QCNCM0043FCZZ	27- 3	DB	AB		C	
〃	28- 6	DB	AB		C	
QCNCM0044FCZZ	27- 4	DD	AC		C	
〃	30- 1	DD	AC		C	
QCNCM0047FCZZ	23- 3	DH	AD		C	
〃	28- 7	DH	AD		C	
QCNCM0049FCZZ	23- 4	DH	AD		C	
QCNCM0054FCZZ	16- 1	DH	AC		C	
〃	26- 2	DH	AC		C	
QCNCM0076FCZZ	23- 5	DQ	AF	N	C	
QCNCM0079FCZZ	28- 8	DD	AC		C	
QCNCM0080FCZZ	27- 5	DH	AD	N	C	
QCNCM0081FCZZ	30- 2	DH	AD		C	
QCNCM0089FCZZ	23- 6	DH	AD	N	C	
QCNCM0090FCZZ	23- 7	DH	AE	N	C	
QCNCM0130FCZZ	8- 47	DL	AE	N		
QCNW—0069FCZZ	18- 71	DD	AC		C	
QEARP0004FCZZ	6- 15	DD	AC	N	B	
QFS—A0046FCZZ	28- 9	DB	AB		A	
QFS—A2700QCZZ	18- 81	DH	AD		A	
QFS—A3003CCZZ	28- 11	DD	AB		A	
QFS—B0030FCZZ	18- 81	DS	AH		A	
QFS—C0010FCZZ	18- 81	DQ	AF		A	

PARTS CODE	NO.	PRICE R.		NEW	P/R	
		Ja.	Ex.			
QFS—D2002WCZZ	28- 10	DD	AB		A	
QFSHA1002CCZZ	28- 12	DB	AB		C	
QFSHB0020FCZZ	18- 82	DL	AF		C	
QPLG—0030FCZZ	12- 2	DL	AE		C	
//	13- 2	DL	AE		C	
//	14- 2	DL	AE		C	
QPLGN0012FCZZ	17- 2	DA	AA		C	
//	19- 13	DA	AA		C	
QPLGN0018FCZZ	3- 16	DA	AA		C	
//	18- 2	DA	AA		C	
QPLGN0019FCZZ	29- 9	DA	AA		C	
QPLGN0026FCZZ	3- 32	DA	AA		C	
//	17- 6	DA	AA		C	
QPWBE0295FCZZ	8- 5	DF	AD	N	C	
QSLPA0051FCZZ	15- 14	DH	AD	N	C	
QSLPA0052FCZZ	15- 15	DD	AC	N	C	
QSLPA0053FCZZ	15- 2	DD	AC	N	C	
QSLPA0058FCZZ	4- 2	DF	AD	N	C	
QSLPA0059FCZZ	19- 44	DD	AC	N	C	
QSLPA0060FCZZ	19- 22	DE	AC	N	C	
QSŌCN0021FCZZ	29- 3	DA	AA		C	
QSW—L0203FCZZ	18- 54	EC	AL	N	A	
QSW—L0204FCZZ	18- 56	EC	AL	N	A	
QSW—L0205FCZZ	16- 2	DN	AF	N	A	
//	26- 4	DN	AF	N	A	
QSW—L0209FCZZ	9- 7	ED	AM	N	A	
QSW—M0127FCZZ	18- 62	DS	AG	N	A	
QSW—M0150FCZZ	3- 7	DS	AG	N	A	
QSW—M0154FCZZ	20- 6	DY	AH		A	
QSW—M0206FCZZ	8- 7	DS	AG	N	A	
QSW—M0211FCZZ	18- 3	DW	AH	N	A	
QSW—P0149FCZZ	3- 5	DH	AD	N	B	
QSW—P0208FCZZ	3- 26	DC	AB	N	B	
//	24- 2	DC	AB	N	B	
QTANN0015FCZZ	18- 69	DS	AG		C	
QTANP0013FCZZ	18- 77	DA	AA	N	C	
QTANP0046FCZZ	18- 75	DA	AA	N	C	
//	29- 4	DA	AA		C	
QTANP0054FCZZ	17- 7	DA	AA	N	C	
QTANP0058FCZZ	18- 66	DD	AC	N	C	
QTANP0059FCZZ	18- 67	DD	AC	N	C	
QTIPH0017FCZZ	18- 4	DA	AA		C	
QTIPH0020FCZZ	3- 19	DA	AA		C	
【R】						
RC—KZ0049FCZZ	29- 5	DL	AF		C	
RC—CZ0111FCZZ	23- 8	DL	AF		C	
RC—CZ0112FCZZ	23- 9	DH	AD		C	
RC—EZ0118FCZZ	28- 13	EM	AP	N	C	
RC—FZ0104FCZZ	6- 25	EM	AP		C	
RC—FZ0105FCZZ	6- 25	EG	AN		C	
RC—FZ0106FCZZ	6- 25	EG	AN	N	C	
RC—FZ0107FCZZ	6- 25	EW	AR		C	
RC—FZ0108FCZZ	6- 25	EW	AR	N	C	
RC—FZ0109FCZZ	6- 25	ES	AQ	N	C	
RC—FZ0130FCZZ	6- 25	EW	AQ		C	
RC—FZ0131FCZZ	6- 25	ES	AQ		C	
RC—FZ0183FCZZ	6- 25	ET	AQ		C	
RC—KZ0046FCZZ	29- 5	DH	AE		C	
//	30- 3	DH	AE		C	
RC—KZ0100FCZZ	29- 5	DQ	AF		C	
RC—QZ0022FCZZ	29- 6	DY	AK		C	
RC—QZ0117FCZZ	23- 10	DH	AD		C	
//	27- 6	DH	AD		C	
RC—QZ0188FCZZ	29- 6	DQ	AF	N	C	
RCILF0009FCZZ	27- 7	EG	AN		C	
RCILF0025FCZZ	27- 7		AP	N	C	
RCILF0027FCZZ	29- 10	EW	AQ	N	C	
RCILF0031FCZZ	29- 8	EZ	AR	N	C	
RDTCT0021FCZZ	11- 37	GC	AZ	N	B	
RDTCT0022FCZZ	17- 12	FV	AX	N	B	
RLMPM5490QCN1	3- 24	DH	AE		A	
//	25- 1	DH	AE		A	
RLMPU0142FCZZ	19- 37	GV	BD		A	
RLMPU0143FCZZ	19- 37	GV	BD		A	
RLMPU0144FCZZ	19- 37	GV	BD		A	
RLMPU0145FCZZ	19- 37	GV	BD		A	
RLMPU0146FCZZ	11- 937	GV	BD		A	
RLMPU0147FCZZ	19- 37	GV	BD	N	A	
RLMPU0148FCZZ	15- 6	FV	AX	N	A	
RLMPU0185FCZZ	19- 37	GV	BD		A	

PARTS CODE	NO.	PRICE R.		NEW	P/R	
		Ja.	Ex.			
RLMPU0190FCZZ	4- 10	GQ	BC		A	
RLMPU0192FCZZ	4- 10	HH	BF	N	A	
RLMPU0193FCZZ	4- 10	HH	BF	N	A	
RMŌTC0187FCZZ	6- 50	HU	BK	N	B	
RMŌTC0190FCZZ	6- 50	HU	BK	N	B	
RMŌTC0191FCZZ	6- 50	HU	BK		B	
RMŌTC0192FCZZ	6- 50	HU	BK	N	B	
RMŌTC0198FCZZ	6- 50	HV	BK		B	
RMŌTE0188FCZZ	6- 54	GQ	BC	N	B	
RMŌTE0189FCZZ	5- 6	FH	AT	N	B	
RMŌTE0193FCZZ	6- 54	GQ	BC	N	B	
RMŌTE0194FCZZ	6- 54	GR	BC	N	B	
RMŌTE0195FCZZ	6- 54	GR	BC	N	B	
RMŌTE0196FCZZ	5- 6	FH	AT	N	B	
RMŌTE0199FCZZ	6- 54	GW	BD		B	
RMPTA0017FCZZ	27- 8	DK	AE	N	B	
//	28- 14	DK	AE		B	
//	30- 4	DK	AE		B	
RMPTA0018FCZZ	28- 14	DK	AE	N	B	
RPLU—0071FCZZ	18- 34	EM	AP	N	A	
RPLU—0079FCZZ	8- 9	EF	AM	N	A	
RR—CZ1003CCZZ	23- 11	DA	AA	N	C	
RR—DZ0025FCZZ	23- 12	DD	AC		C	
RR—DZ0097FCZZ	23- 13	DD	AC	N	C	
RR—DZ0098FCZZ	23- 14	DH	AD	N	C	
RR—DZ0101FCZZ	28- 15	DH	AD		C	
RR—DZ0104FCZZ	27- 9	DS	AG		C	
RR—DZ0107FCZZ	27- 10	DD	AC		C	
RR—DZ0132FCZZ	23- 15	DS	AG	N	C	
RR—DZ0139FCZZ	23- 16	DH	AC		C	
RR—DZ0140FCZZ	23- 17	DD	AC	N	C	
RR—DZ0144FCZZ	23- 18	DD	AC	N	C	
RR—DZ0195FCZZ	23- 19	DB	AB	N	C	
RR—DZ0196FCZZ	23- 20	DC	AB	N	C	
RR—DZ0197FCZZ	23- 21	DD	AC	N	C	
RR—DZ0198FCZZ	23- 22	DD	AC	N	C	
RR—NZ0165FCZZ	23- 23	DA	AA	N	C	
RR—NZ0167FCZZ	27- 11	DH	AD		C	
RR—XZ0102FCZZ	27- 12	DH	AD		B	
RRLYU0063FCZZ	30- 5	EG	AM		B	
RRLYU0067FCN2	18- 85	FU	AX	N	B	
RTRNL0181FCZZ	27- 13	DY	AH		B	
//	28- 16	DY	AH		B	
RTRNP0230FCZZ	18- 87	GV	BD	N	B	
RTRNP0235FCZZ	18- 87	GW	BD	N	B	
RTRNZ0231FCZZ	9- 1	HA	BE	N	B	
RTRNZ0237FCZZ	11- 34	FX	AX	N	B	
RTRNZ0240FCZZ	18- 53	HC	BE	N	B	
RTRNZ0241FCZZ	19- 17	HA	BE	N	B	
RTRNZ0242FCZZ	9- 1	HA	BE	N	B	
RTRNZ0249FCZZ	18- 53	HC	BE	N	B	
RTRNZ0250FCZZ	19- 17	HA	BE	N	B	
RVR—MD320QCZZ	27- 14	DJ	AE		B	
RVR—Q0003FCZZ	3- 14	DU	AG	N	A	
【S】						
SPAKA0899FCZZ	22- 8	ET	AQ	N	D	
SPAKC0898FCZZ	22- 7	FC	AS	N	D	
SPAKC0906FCZZ	22- 9	EK	AN	N	D	
SSAKA0002FCZZ	22- 11	DA	AA		D	
SSAKA0019SCZZ	22- 12	DA	AA		D	
SSAKH0011MCZZ	22- 10	DB	AA		D	
【T】						
TCADS0162FCZZ	22- 22		AG	N	D	
TCADS0163FCZZ	22- 23		AP	N	D	
TCADS0216FCZZ	22- 15	DW	AH	N	D	
TCADZ0194FCZZ	22- 24		AB	N	D	
TCADZ0214FCZZ	22- 13	DD	AC		D	
TCADZ0215FCZZ	22- 14	DW	AH	N	D	
TCADZ0217FCZZ	22- 16	DB	AB	N	D	
TCADZ0219FCZZ	22- 25		AD	N	D	
TCAUA0766FCZZ	1- 11	DB	AB	N	C	
TCAUA0770FCZZ	1- 11	DC	AB	N	C	
TCAUH0684FCZZ	1- 11	DB	AA	N	C	
TCAUH0687FCZZ	1- 11	DB	AA	N	C	
TINSE0343FCZZ	22- 26	EM		N	D	
TINSF0344FCZZ	22- 27		AQ	N	D	
TINSG0345FCZZ	22- 28		AS	N	D	
TINSJ0341FCZZ	22- 17	FU	AM	N	D	
TINSS0346FCZZ	22- 29		AS	N	D	
TLAB—4681CCZZ	18- 78	DA	AA		C	

PARTS CODE	NO.	PRICE R.		NEW	P/R	
		Ja.	Ex.			
TLABH0543FCZZ	12-11	DA	AA		C	
〃	13-8	DA	AA		C	
〃	14-7	DA	AA	N	C	
TLABH0865FCZZ	20-25	DM	AE	N	C	
TLABH0866FCZZ	20-25		AE	N	C	
TLABH0867FCZZ	20-25		AE	N	C	
TLABH0868FCZZ	20-24	DG	AD	N	C	
TLABH0869FCZZ	3-1	DR	AG	N	C	
TLABH0870FCZZ	3-1		AG	N	C	
TLABH0871FCZZ	3-1		AG	N	C	
TLABH0872FCZZ	1-14	EC	AL	N	C	
TLABH0873FCZZ	1-14	EP	AP	N	C	
TLABH0874FCZZ	1-14	EP	AP	N	C	
TLABH0875FCZZ	1-14	EP	AP	N	C	
TLABJ0572FCZZ	1-12	DC	AB		C	
TLABP0466FCZZ	12-10	DA	AA		C	
TLABP0467FCZZ	13-7	DA	AA	N	C	
TLABP0468FCZZ	14-12	DA	AA	N	C	
TLABZ0493FCZZ	1-13	DA	AA		C	
TLABZ0816FCZZ	18-96	DA	AA	N	C	
TLABZ0876FCZZ	6-85	DA	AA	N	C	
TLABZ0881FCZZ	21-10	DB	AB	N	C	
TLABZ0882FCZZ	21-9	DA	AA	N	C	
TLABZ0884FCZZ	21-10		AC	N	C	
TLABZ0892FCZZ	20-21	DB	AB	N	C	
TLABZ0901FCZZ	18-76		AA	N	C	
TLABZ0914FCZZ	22-30		AG	N	D	
TLABZ0915FCZZ	22-31		AG	N	D	
TLSTS1006CCZZ	22-18	DA	AA		D	
【U】						
UBATL0003FCZZ	23-24	EC	AL	N	S	
UCLE—0027FCZZ	22-20	DF	AD		D	
UCLE—0029FCZZ	11-33	FK	AU	N	B	
UCLER0031FCZZ	19-31	EZ	AR	N	B	
UCLEZ0009FCZZ	22-19	DL	AE		D	
UCLEZ0016FCZZ	17-10	FY	AY		B	
UCLEZ0017FCZZ	17-13	EC	AL		B	
UCLEZ0018FCZZ	17-16	EC	AL		B	
UKOG—0078FCZZ	22-21	DC	AC		D	
UKOG—0082FCZZ	31-2	ET	AP	N	D	
UKOG—0088FCZZ	31-3	DR	AG	N	D	
UKOGG0048FCZZ	31-4	DH	AD		D	
UKOGG0050FCZZ	31-5	EC	AL		D	
UKOGG0056FCZZ	31-6	GD	AZ		D	
UKOGG0058FCZZ	31-7	EM	AM		D	
UKOGG0087FCZZ	31-8	FP	AV	N	D	
UKOGM0102CSZZ	31-9	GQ	BC	N	D	
【V】						
VCEAAU1EW106Q	23-25	DB	AC		C	
VCEAAU1VW107Q	27-15	DD	AC		C	
VCEAAU1VW476Q	23-26	DB	AC		C	
〃	28-17	DB	AC		C	
VCKYPU1HB102K	23-27	DA	AA		C	
VCKYPU1HF223Z	16-7	DB	AA		C	
〃	23-28	DB	AA		C	
〃	26-5	DB	AA		C	
〃	28-18	DB	AA		C	
VCQYKU1HM102K	27-16	DB	AA	N	C	
VCQYKU1HM104K	18-65	DD	AB		C	
VCQYKU1HM104M	23-29	DD	AB		C	
〃	27-17	DD	AB		C	
VCQYKU1HM222M	23-30	DB	AB	N	C	
VCQYKU1HM333K	27-18	DB	AB		C	
VCQYKU1HM473K	28-19	DB	AB		C	
VCSATU1CE225M	23-31	DH	AD	N	C	
VCSATU1HE475K	28-20	DQ	AM	N	C	
VCSATU1VE224M	23-32	DH	AC	N	C	
VHDDS1588L2—1	23-33	DB	AB		B	
〃	24-3	DB	AB		B	
〃	27-19	DB	AB		B	
〃	28-21	DB	AB		B	
VHDSIRB40Z/—1	27-20	DS	AG		B	
VHDS5VB10//—1	28-22	EM	AP		B	
VHDWO6B////—1	23-34	DH	AE		B	
〃	27-21	DH	AE		B	
〃	28-23	DH	AE		B	
VHEEZ062///—1	23-35	DD	AC		B	
VHERD24E3//—1	23-36	DB	AC		B	
VHERD27EL2/—1	28-26	DB	AB	N	B	
VHERD5.1EB/—1	23-37	DH	AD		B	

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		Ja.	Ex.			
VHERD5.6E6/—1	28-24	DH	AC		B	
VHEYZ055C//—1	23-38	DD	AC		B	
VHEYZ108///—1	28-25	EC	AE		B	
VHEYZ171///—1	27-22	DQ	AF		B	
VHID7801G—122	23-39	GF	AZ	N	B	
VHIHD44700A06	23-40	FL	AU	N	B	
VHIM54514P/—1	23-41	DS	AH	N	B	
VHIM54526P/—1	23-42	DS	AH		B	
VHIM54533P/—1	23-43	DY	AH		B	
VHIM54537P/—1	23-44	DS	AH		B	
VHINJM2901N—1	23-45	EB	AK	N	B	
VHINJM2904D—1	23-46	DS	AG	N	B	
VHIUPC324C/—1	27-23	EC	AL		B	
VHIUPD4011B—1	23-47	DL	AF	N	B	
VHPEESM3B//—1	16-3	EG	AN		B	
〃	26-6	EG	AN		B	
VHPGL3AR1//—1	23-48	DH	AD		B	
〃	28-27	DH	AD		B	
VHPGL3EG7//—1	24-4	DC	AB	N	B	
VHPGL3HD7//—1	3-23	DD	AC	N	B	
〃	24-5	DD	AC		B	
VHPGL6E201/—1	24-6	ET	AQ		B	
VHPPC714///—1	27-24	DS	AG		B	
VHSAC12DIM/—1	27-25	EG	AM		B	
VHSAC16FIF/—1	18-68	FS	AW		B	
VHSBCR30GM8R1	18-68	FG	AT	N	B	
VRD—ST2EY102J	28-48	DB	AA		C	
VRD—ST2EY102J	27-26	DB	AA		C	
VRD—ST2EY103J	23-49	DA	AA		C	
〃	27-27	DA	AA		C	
〃	28-28	DA	AA		C	
VRD—ST2EY105J	29-7	DA	AA		C	
VRD—ST2EY121J	23-50	DA	AA	N	C	
VRD—ST2EY122J	23-51	DA	AA		C	
〃	28-29	DA	AA		C	
VRD—ST2EY132J	16-6	DA	AA	N	C	
〃	26-7	DA	AA		C	
VRD—ST2EY153J	28-30	DA	AA		C	
VRD—ST2EY183J	23-52	DB	AA		C	
〃	28-31	DB	AA		C	
VRD—ST2EY221J	23-53	DA	AA		C	
VRD—ST2EY222J	28-32	DA	AA		C	
VRD—ST2EY223J	23-54	DA	AA		C	
〃	28-33	DA	AA		C	
VRD—ST2EY242J	28-34	DA	AA		C	
VRD—ST2EY272J	27-28	DA	AA		C	
VRD—ST2EY305J	27-29	DA	AA		C	
VRD—ST2EY332J	23-55	DA	AA		C	
VRD—ST2EY333J	28-49	DA	AA		C	
VRD—ST2EY471J	23-56	DA	AA		C	
VRD—ST2EY472J	23-57	DA	AA		C	
VRD—ST2EY473J	23-58	DA	AA		C	
〃	27-30	DA	AA		C	
〃	28-35	DA	AA		C	
VRD—ST2EY474J	29-7	DA	AA		C	
VRD—ST2EY5R6J	28-50	DA	AA		C	
VRD—ST2EY511J	28-36	DB	AA		C	
VRD—ST2EY562J	24-7	DB	AA		C	
VRD—ST2EY565J	23-59	DA	AA		C	
VRD—ST2EY682J	23-60	DB	AA		C	
〃	28-37	DB	AA		C	
VRD—ST2EY752J	28-38	DA	AA		C	
VRD—ST2EY753J	28-39	DA	AA		C	
〃	28-51	DA	AA		C	
VRD—ST2EY822J	28-40	DB	AA		C	
VRD—ST2EY912J	28-41	DA	AA	N	C	
VRD—ST2HY361J	23-61	DA	AA	N	C	
VRN—RT2EK103F	27-31	DH	AB		C	
VRN—RT2EK204F	27-32	DB	AB		C	
VRN—RT2EK273F	27-33	DD	AC	N	C	
VRN—RT2EK394F	23-62	DB	AB		C	
VRN—RT2EK433F	23-63	DA	AA	N	C	
VRN—RT2EK473F	23-64	DB	AB		C	
VRN—RT2EK513F	23-65	DD	AB	N	C	
VRN—RT2EK562F	23-66	DD	AC		C	
VRN—RT2EK622F	27-34	DB	AB		C	
VRN—RT2EK682F	23-67	DH	AB		C	
VRN—RT2EK912F	23-68	DD	AC		C	
VRS—ST3AB152J	28-42	DB	AB	N	C	
VRS—ST3DB201J	23-69	DB	AB	N	C	

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		Ja.	Ex.			
VRS—ST3DB223J	27- 35	DB	AB		C	
VRS—ST3DB430J	23- 70	DB	AB	N	C	
//	25- 2	DB	AB		C	
VS2SA733—//—1	23- 71	DH	AD		B	
//	28- 43	DH	AD		B	
VS2SC1061—C—1	23- 72	DY	AH		B	
VS2SC1826—GBC	28- 44	DQ	AF		B	
VS2SC2578—/—S	28- 45	DY	AH	N	B	
VS2SC945///—1	23- 73	DH	AD		B	
//	27- 36	DH	AD		B	
//	28- 46	DH	AD		B	
VS2SD592ANR—1	27- 37	DH	AD		B	
//	28- 47	DH	AD		B	
【X】						
XBBSD30P04000	90-B83	DA	AA		C	
XBPBN30P08K00	90-B01	DA	AA		C	
XBPBN30P08000	90-B02	DA	AA		C	
XBPBN30P10KS0	90-B03	DA	AA		C	
XBPBN30P10K00	90-B04	DA	AA		C	
XBPBN30P10000	90-B05	DA	AA		C	
XBPBN30P12000	90-B06	DA	AA		C	
XBPBN40P06000	90-B07	DA	AA		C	
XBPBN40P08K00	90-B08	DA	AA		C	
XBPBN40P12K00	90-B09	DA	AA		C	
XBPBN50P12000	90-B10	DA	AA		C	
XBPBZ30P08K00	90-B11	DA	AA		C	
XBPBZ30P08000	90-B12	DA	AA		C	
XBPBZ30P12KS0	90-B13	DA	AA		C	
XBPBZ40P06K00	90-B89	DA	AA		C	
XBPBZ40P06000	90-B14	DA	AA		C	
XBPBZ40P08K00	90-B15	DA	AA		C	
XBPBZ40P08000	90-B16	DA	AA		C	
XBPBZ40P10000	90-B82	DA	AA		C	
XBPBZ40P12K00	90-B17	DA	AA		C	
XBPBZ50P06K00	90-B18	DB	AB		C	
XBPRZ30P04000	90-B19	DA	AA		C	
XBPRZ30P06000	90-B20	DA	AA		C	
XBPRZ40P06000	90-B21	DA	AA		C	
XBPRZ40P16000	90-B22	DB	AA		C	
XBPRZ40P25000	90-B23	DB	AB		C	
XBPSD23P06000	90-B86	DA	AA		C	
XBPSD23P12000	90-B87	DA	AA		C	
XBPSD30P04K00	90-B24	DA	AA		C	
XBPSD30P05K00	90-B25	DA	AA		C	
XBPSD30P05000	90-B26	DA	AA		C	
XBPSD30P06KS0	90-B27	DA	AA		C	
XBPSD30P06K00	90-B28	DA	AA		C	
XBPSD30P06000	90-B29	DA	AA		C	
XBPSD30P08KS0	90-B30	DA	AA		C	
XBPSD30P08K00	90-B31	DA	AA		C	
XBPSD30P08000	90-B32	DA	AA		C	
XBPSD30P10KS0	90-B33	DA	AB		C	
XBPSD30P10K00	90-B34	DA	AA		C	
XBPSD30P10000	90-B35	DA	AA		C	
XBPSD30P12000	90-B36	DA	AA		C	
XBPSD30P14K00	90-B90	DA	AA		C	
XBPSD30P14000	90-B37	DA	AA		C	
XBPSD30P16KS0	90-B38	DA	AA		C	
XBPSD30P16K00	90-B39	DA	AA		C	
XBPSD30P16000	90-B40	DA	AA		C	
XBPSD30P18KS0	90-B41	DA	AA		C	
XBPSD30P18K00	27- 38	DA	AA		C	
XBPSD30P25K00	90-B42	DA	AA		C	
XBPSD30P25000	90-B43	DA	AA		C	
XBPSD30P30000	90-B44	DA	AA		C	
XBPSD40P04000	90-B45	DA	AA		C	
XBPSD40P05K00	90-B46	DA	AA		C	
XBPSD40P06KS0	90-B47	DA	AA		C	
XBPSD40P06K00	90-B48	DA	AA		C	
XBPSD40P06000	90-B49	DA	AA		C	
XBPSD40P08KS0	90-B50	DA	AA		C	
XBPSD40P08K00	90-B51	DA	AA		C	
XBPSD40P08000	90-B52	DA	AA		C	
XBPSD40P10KS0	90-B53	DA	AA		C	
XBPSD40P10K00	90-B54	DA	AA		C	
XBPSD40P12KS0	90-B55	DA	AA		C	
XBPSD40P12K00	90-B56	DA	AA		C	
XBPSD40P14KS0	90-B57	DA	AA		C	
XBPSD40P14000	90-B84	DA	AA		C	
XBPSD40P16KS0	90-B58	DA	AA		C	
XBPSD40P16K00	90-B59	DA	AA		C	
XBPSD40P16000	90-B60	DA	AA		C	
XBPSD40P18000	90-B61	DA	AA		C	
XBPSD40P20K00	90-B62	DA	AA		C	
XBPSD40P20000	90-B63	DA	AA		C	
XBPSD40P25000	90-B64	DA	AA		C	
XBPSD40P30K00	90-B65	DA	AA		C	
XBPSD50P08K00	90-B66	DA	AA		C	
XBPSD50P10K00	90-B67	DA	AA		C	
XBPSD50P20000	90-B68	DA	AA		C	
XBPSD60P16KS0	90-B69	DA	AA		C	
XBPSD60P20000	90-B70	DA	AA		C	
XBPSF30P06KS0	90-B71	DA	AA		C	
XBPSF30P06K00	90-B72	DA	AA		C	
XBPSF30P08KS0	90-B73	DA	AA		C	
XBPSF30P08K00	90-B74	DA	AA		C	
XBPSF30P08000	90-B75	DA	AA		C	
XBPSF40P06K00	90-B76	DA	AA		C	
XBPSF40P08KS0	90-B77	DA	AA		C	
XBPSF40P08K00	90-B78	DA	AA		C	
XBPSF40P08000	90-B79	DA	AA		C	
XBPSF40P10K00	90-B85	DA	AA		C	
XBPUZ40P06000	90-B80	DA	AA		C	
XBPUZ40P12K00	90-B81	DA	AA		C	
XBSBZ40P08000	90-S01	DA	AA		C	
XBSBZ40P10000	90-S02	DA	AA		C	
XBSRZ30P06000	90-S03	DA	AA		C	
XBSSD30P06000	90-B88	DA	AA		C	
XBSSD30P16000	90-S04	DA	AA		C	
XBSSD40P06000	90-S05	DA	AA		C	
XBSSD40P08000	90-S06	DA	AA		C	
XBSSD40P10000	90-S07	DA	AA		C	
XBTSC30P06000	90-T01	DA	AA		C	
XBTSC40P06000	90-T02	DA	AA		C	
XBTSC40P08000	90-T03	DA	AA		C	
XBTSC40P10000	90-T13	DA	AA		C	
XBTSD40P06000	90-T04	DA	AA		C	
XBTSF30P06000	90-T05	DA	AA		C	
XBTSF40P05000	90-T06	DA	AA		C	
XBTSF40P06000	90-T07	DA	AA		C	
XBTSF40P08000	90-T08	DA	AA		C	
XBTSF40P10000	90-T09	DA	AA		C	
XBTSF40P14000	90-T10	DA	AA		C	
XBTSF40P16000	90-T11	DA	AA		C	
XBTSF50P06000	90-T12	DA	AA		C	
XCBSD30P06000	90-C01	DA	AA		C	
XCBSD30P08000	90-C02	DA	AA		C	
XCBSD30P10000	90-C20	DA	AA		C	
XCPSD30P06000	90-C03	DB	AA		C	
XCPSD30P08000	90-C04	DA	AA		C	
XCPSD30P12000	90-C05	DA	AA		C	
XCPSD30P18000	90-C06	DA	AA		C	
XCPSD40P06000	90-C07	DA	AA		C	
XCPSD40P08000	90-C08	DA	AA		C	
XCPSD40P10000	90-C09	DA	AA		C	
XCPSD40P16000	90-C10	DA	AA		C	
XCPSF30P06000	90-C11	DA	AA		C	
XCPSF40P08000	90-C12	DA	AA		C	
XCSSC40P10000	90-C13	DA	AA		C	
XCSSD30P06000	90-C14	DA	AA		C	
XCSSD30P10000	90-C15	DA	AA		C	
XCSSF30P08000	90-C16	DA	AA		C	
XCTSD40P06000	90-C17	DA	AA		C	
XCTSF30P08000	90-C18	DA	AA		C	
XCTSF40P10000	90-C19	DA	AA		C	
XNEBN30—24000	90-N01	DA	AC		C	
XNEBN40—32000	90-N02	DA	AA		C	
XNEBN50—40000	90-N03	DA	AA		C	
XNESD30—18000	90-N04	DA	AA		C	
XNESD30—24000	90-N05	DA	AA		C	
XNESD40—24000	90-N06	DA	AA		C	
XNESD40—32000	90-N07	DA	AA		C	
XNESD50—40000	90-N08	DA	AA		C	
XRASP04—10000	90-E10	DA	AA		C	
XRESP20—04000	90-E01	DA	AA		C	
XRESP30—04000	90-E02	DA	AA		C	
XRESP30—05000	90-E03	DA	AA		C	
XRESP40—05000	90-E04	DA	AA		C	
XRESP40—06000	90-E05	DA	AA		C	
XRESP50—06000	90-E06	DA	AA		C	

PARTS CODE	NO.	PRICE R.		NEW	P/R	
		Ja.	Ex.			
XRESP60—08000	90-E07	DA	AA		C	
XRESP70—08000	90-E08	DA	AA		C	
XRESP90—08000	90-E09	DA	AA		C	
XUPSD30P06000	90-C21	DA	AA		C	
XWHBN30—05000	90-W01	DA	AA		C	
XWHBN40—08100	90-W02	DA	AA		C	
XWHSD30—05000	90-W03	DA	AA		C	
XWHSD30—05080	90-W04	DA	AA		C	
XWHSD30—08100	90-W05	DA	AA		C	
XWHSD40—08000	90-W06	DA	AA		C	
XWHSD40—08100	90-W07	DA	AA		C	
XWHSD40—08120	90-W08	DA	AA		C	
XWHSD50—08120	90-W09	DA	AA		C	
XWHSF40—08100	90-W10	DA	AA		C	
XWSPN30—07000	90-W11	DA	AA		C	
XWSSD50—13000	90-W12	DA	AA		C	
XWUSD30—04065	90-W13	DA	AA		C	
XXXSP30L06000	19- 34	DB	AA		C	
XXXSP30L08000	11- 13	DB	AB		C	
XXXSP30L10000	18- 19	DB	AB		C	

PARTS CODE	NO.	PRICE R.		NEW	P/R	
		Ja.	Ex.			